

Commonwealth of Massachusetts • Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

40 Years Cleaner, 40 Years Greener - MassDEP Celebrates Four Decades of Environmental Progress

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

November 19, 2015

Michael Yunits, Town Administrator Town of Norton 70 East Main Street Norton, Massachusetts 02766 RE: NORTON

Release Tracking Number 4-0025855 Former Reed and Barton Facility 47 Elm Street

ANALYTICAL RESULTS

Dear Mr. Yunits:

The Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup (MassDEP) conducted groundwater/sediment sampling on October 27 and 30, 2015 in the vicinity of the former Reed & Barton Facility (Facility) located at 47 Elm Street in Norton. The purpose of this limited environmental investigation was to determine if previous activities at the Facility have resulted in a release of oil and/or hazardous material to the environment pursuant to the Massachusetts Oil and Hazardous Material Release Prevention and Response Act (M.G.L. Chapter 21E). M.G.L. Chapter 21E is implemented through regulations known as the Massachusetts Contingency Plan (310 CMR 40.0000 et seq. — the MCP). Both M.G.L. c. 21E and the MCP require the performance of response actions to provide for the protection of harm to health, safety, public welfare and the environment which may result from releases of oil and/or hazardous material.

Enclosed are the laboratory results from the analysis of groundwater samples obtained from Microwells RB-5, RB-6, RB-7, RB-8 and RB-9 and seepage meter RB-SM1 which were installed by MassDEP. Microwells RB-1, RB-3 and RB-4 were not installed and a groundwater sample was not obtained from RB-2 due to insufficient groundwater recharge. The locations of the various sampling points are indicated on the enclosed Site Plan. Analytical results received by MassDEP on October 30, 2015 indicate that trichloroethylene (TCE) was detected in a groundwater sample collected by MassDEP from Microwell RB-5 located immediately downgradient of the Former Reed and Barton Facility at a concentration of 9.7 micrograms per liter (ug/L). This TCE concentration is greater than the MCP Category RCGW-1/RCGW-2 Reportable Concentration (5 ug/L) for TCE in groundwater. One sediment sample was obtained from the Rumford River downstream from the closed waste disposal lagoons associated with the Former Reed & Barton Facility and analyzed for metals. Mercury was the only metal detected in the sediment at a concentration exceeding MassDEP's Stage I Freshwater Sediment Screening Criteria for Metals.

MassDEP has assigned Release Tracking Number 4-0025855 to this release and has issued a Notice of Responsibility dated November 16, 2015 to RB Liquidation, Inc., f/k/a Reed and Barton Corporation.

Complete copies of the laboratory data packages are available by contacting MassDEP's Southeast Regional Office in Lakeville, Massachusetts or through the MassDEP Searchable Sites database at: http://public.dep.state.ma.us/SearchableSites2/Search.aspx.

MassDEP appreciates the cooperation of the Town of Norton in granting access for this limited environmental investigation. If you have any questions regarding the enclosed analytical results, please contact Elliott Jacobs at the letterhead address or by calling (508) 946-2786.

Sincerely

Leonard J. Pinaud, Chief State & Federal Site Management Bureau of Waste Site Cleanup

P/EJ/lg

Enclosures: Site Plan and Analytical Data

ec: Norton Board of Health

Norton Conservation Commission ATTN: Jennifer Carlino, Conservation Agent

Norton Fire Department ATTN: Captain Kent Campbell

DEP-SERO
Gerard Martin, Acting Deputy Regional Director
Elliott Jacobs, Project Manager



ANALYTICAL REPORT

Lab Number:

L1527533

Client:

Massachusetts DEP

20 Riverside Drive

Lakeville, MA 02347-1676

ATTN:

Elliot Jacobs

Phone:

(508) 946-2786

Project Name:

REED & BARTON

Project Number:

101726.00

Report Date:

10/30/15

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



REED & BARTON

Project Number: 101726.00

Lab Number:

L1527533

Report Date:

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1527533-01	RB-7	WATER	47 ELM ST., NORTON	10/27/15 11:15	10/27/15
L1527533-02	RB-6	WATER	47 ELM ST., NORTON	10/27/15 11:15	10/27/15
L1527533-03	RB-5	WATER	47 ELM ST., NORTON	10/27/15 14:00	10/27/15
L1527533-04	RB-SED-1	SOIL	47 ELM ST., NORTON	10/27/15 10:00	10/27/15
L1527533-05	TRIP BLANK	WATER	47 ELM ST., NORTON	10/27/15 00:00	10/27/15

Project Name:

REED & BARTON

Project Number: 101726.00

Lab Number:

L1527533

Report Date:

10/30/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

A	Were all samples received in a condition consistent with those described on the Chain-of- Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
В	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
С	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
Eb.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A re	A response to questions G, H and I is required for "Presumptive Certainty" status								
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES							
Н	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO							
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO							

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name:

REED & BARTON

Project Number: 10

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance. Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

Case Narrative (continued)

MCP Related Narratives

Sample Receipt

In reference to question H:

A Matrix Spike was not submitted for the analysis of Metals.

Volatile Organics

In reference to question H:

The initial calibration, associated with L1527533-01, -02, and -03, did not meet the method required minimum response factor on the lowest calibration standard for trichloroethene (0.17985), 4-methyl-2-pentanone (0.05585), and 1,4-dioxane (0.00038), as well as the average response factor for 2-butanone, trichloroethene, 4-methyl-2-pentanone, and 1,4-dioxane.

The continuing calibration standard, associated with L1527533-01, -02, and -03, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

Metals

In reference to question I:

All samples were analyzed for a subset of MCP analytes per the Chain of Custody.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

(600, Selly Stenstrom

Authorized Signature:

Title: Technical Director/Representative

Date: 10/30/15



ORGANICS



VOLATILES



Project Name:

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-01

Client ID:

RB-7

Sample Location:

47 ELM ST., NORTON

Matrix:

Water

Analytical Method: Analytical Date:

97,8260C 10/29/15 21:05

Analyst:

MS

Date Collected:

10/27/15 11:15

Date Received:

10/27/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0		1
1,1-Dichloroethane	ND		ug/l	1.0		1
Chloroform	ND		ug/l	1.0		1
Carbon tetrachloride	ND		ug/i	1.0		1
1,2-Dichloropropane	ND		ug/l	1.0		1
Dibromochloromethane	ND		ug/l	1.0		1
1,1,2-Trichloroethane	ND		ug/l	1.0		1
Tetrachloroethene	ND	•	ug/l	1.0	***	1
Chlorobenzene	ND		ug/l	1.0		1
Trichlorofluoromethane	ND		ug/l	2.0		1
1,2-Dichloroethane	ND		ug/l	1.0		1
1,1,1-Trichloroethane	ND		ug/l	1.0		. 1
Bromodichloromethane	ND		ug/l	1.0		1
trans-1,3-Dichloropropene	NO		ug/l	0.50	Page 1	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	h-h-	1
1,3-Dichloropropene, Total	ND		ug/l	0.50		1
1,1-Dichloropropene	ND		ug/l	2.0		1
Bromoform	ND		ug/l	2.0		1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0		1
Benzene	ND		ug/l	0.50		1
Toluene	1.4		ug/l	1,0		1
Ethylbenzene	ND .		ug/l	1.0		1
Chloromethane	ND		ug/l	2.0		1
Bromomethane	ND	,	ug/l	2.0		1
Vinyl chloride	ND		ug/l	1.0		1
Chloroethane	ND		ug/l	2,0		1
1,1-Dichloroethene	ND	•	ug/l	1.0		1
trans-1,2-Dichloroethene	ND		ug/l	1.0		1
Trichloroethene	ND		ug/l	1.0		1
1,2-Dichlorobenzene	ND		ug/l	1.0		1

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-01

Client ID:

RB-7

Date Collected:

10/27/15 11:15 10/27/15

Date Received:

Sample Location: 47	ELM ST., NORTON			*	Field Pre		Not Specified	
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor	
MCP Volatile Organics -	Westborough Lab					In the design of the second of		
1,3-Dichlorobenzene		ND		ug/l	1.0		1	
1,4-Dichlorobenzene		ND		ug/l	1.0		1	
Methyl tert butyl ether	,	ND		ug/l	2.0		1	
p/m-Xylene	,	ND		ug/l	2.0		1	
o-Xylene		ND		ug/l	1.0		1	
Xylene (Total)		ND		ug/l	1.0		1	
cis-1,2-Dichloroethene		ND		ug/l	1.0		1	
1,2-Dichloroethene (total)		ND		ug/l	1.0		1	
Dibromomethane	•	ND		ug/l	2.0		1	
1,2,3-Trichloropropane		ND		ug/l .	2.0		1	
Styrene		ND		ug/l	1.0		1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Dichlorodifluoromethane	•••	ND		ug/l	2.0		1	
Acetone		ND		ug/l	5.0		1	
Carbon disulfide		ND		ug/l	2.0		1	
2-Butanone		ND		ug/l	5.0		1	
4-Methyl-2-pentanone	The second secon	ND		ug/l	5.0		1	
2-Hexanone		ND		ug/l	5.0		1	
Bromochloromethane		ND		ug/l	2.0		1	-
Tetrahydrofuran		ND		ug/l	2.0	trat	1	
2,2-Dichloropropane		ND		ug/l	2.0		1	•
1,2-Dibromoethane		ND		ug/i	2.0		1	
1,3-Dichloropropane		ND		ug/l	2.0		1	
1,1,1,2-Tetrachloroethane	•	ND	** *	ug/i	1.0	· 	1 .	
3romobenzene	4.4	ND		ug/i	2.0		1	
n-Butylbenzene		ND		ug/l	2.0		1	
sec-Butylbenzene		ND		ug/l	2.0		1	
tert-Butylbenzene	. promptep magnitude and a second sec	ND		ug/i	2.0		1	
o-Chlorotoluene	*	ND		ug/l	2.0		1	
o-Chlorotoluene		ND		ug/l	2.0		1	
1,2-Dibromo-3-chioropropane		ND		ug/l	2.0	***	1	
	•	ND		ug/l	0.60		1	
sopropylbenzene		ND		ug/l	2.0	==	1	
o-Isopropyltoluene		ND		ug/l	2.0	***	1	
Naphthalene		ND		ug/l	2.0		1	
n-Propylbenzene		ND		ug/l	2,0		1	
1,2,3-Trichlorobenzene		ND	•	ug/l	2.0		1	
1,2,4-Trichlorobenzene		ND		ug/l	2.0			.*
1,3,5-Trimethylbenzene		ND		ug/l	2,0		· 1	
1,2,4-Trimethylbenzene		ND		ug/l	2,0		1	
1)E34 THILDRINADGUSONO		1712		ug/I	_,0			



Project Name:

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-01

Client ID:

Sample Location:

RB-7

47 ELM ST., NORTON

Date Collected:

Field Prep:

10/27/15 11:15

Date Received:

10/27/15 Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab	THE REST OF STREET					
Ethyl ether	ND		ug/l	2.0	***	1
Isopropyl Ether	ND		ug/l	2.0		1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0		1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	***	1
1,4-Dloxane	ND		ug/l	250		1

Surrogate	% Recovery	Qualifler	Acceptance Criteria	
1,2-Dichloroethane-d4	104		70-130	•
Toluene-d8	95		70-130	
4-Bromofluorobenzene	98		70-130	
Dibromofluoromethane	101		70-130	

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-02

Client ID:

RB-6

Sample Location:

47 ELM ST., NORTON

Matrix:

Water

Analytical Method: Analytical Date: 97,8260C 10/29/15 21:31

Analyst:

MS

Date Collected:

10/27/15 11:15

Date Received:

Field Prep:

10/27/15 Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab						
Methylene chloride	ND		ug/l	2.0	***	1
1,1-Dichloroethane	ND		ug/l	1.0		1
Chloroform	ND		ug/l	1.0		1
Carbon tetrachtoride	ND		ug/l	1.0		1
1,2-Dichloropropane	ND		ug/l	1.0	***	1
Dibromochloromethane	ND		ug/l	1.0		1
1,1,2-Trichloroethane	ND		ug/l	1.0		1
Tetrachloroethene	ND		ug/l	1.0		1
Chlorobenzene	ND	and a final object of the second of the seco	ug/l	1.0	**	. 1
Trichlorofluoromethane	ND		ug/l	2.0	**	1
1,2-Dichloroethane	ND		ug/l	1.0		1
1,1,1-Trichloroethane	ND		ug/l	1.0		1
Bromodichloromethane	ND		ug/i	1.0	•	1
trans-1,3-Dichloropropene	ND		ug/l	0.50		1
cis-1,3-Dichloropropene	ND .		ug/l	0.50		1
1,3-Dichloropropene, Total	ND		ug/l	0.50		1
1,1-Dichloropropene	ND		ug/l	2.0		1
Bromoform	ND		ug/l	2.0		1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	***	1
Benzene	ND	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ug/l	0,50		1 :
Toluene	1.6		ug/l	1.0		1
Ethylbenzene	ND		ug/l	1.0		1
Chloromethane	ND		ug/l	2.0		1
Bromomethane	ND		ug/l	2.0	***	1
Vinyl chloride	ND		ug/l	1.0		1
Chloroethane	ND		ug/l	2.0		1
1,1-Dichloroethene	ND		ug/l	1.0		1
trans-1,2-Dichloroethene	ND		ug/l	1.0		1
Trichloroethene	ND		ug/l	1.0		1
1,2-Dichlorobenzene	ND	** * *	ug/l	1.0		1

Project Name: **Project Number:** **REED & BARTON**

Lab Number:

L1527533

101726.00

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-02

Client ID:

Sample Location:

RB-6

47 ELM ST., NORTON

Date Collected: Date Received: 10/27/15 11:15 10/27/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough Lab	Përdina a : Prepara :					
1,3-Dichlorobenzene	ND		ug/l	1.0	***	1
1,4-Dichlorobenzene	ND		ug/l	1.0		1
Methyl tert butyl ether	ND		ug/l	2.0		1
p/m-Xylene	ND		ug/l	2.0		1
o-Xylene	ND		ug/l	1.0		1
Xylene (Total)	ND		ug/l	1.0		1
cis-1,2-Dichloroethene	3.2		ug/l	1.0		1
1,2-Dichloroethene (total)	3.2		ug/l	1.0		1
Dibromomethane	ND		ug/l	2.0		1
1,2,3-Trichloropropane	ND		ug/l	2.0		1
Styrene	ND		ug/l	1.0		1
Dichlorodifluoromethane	ND		ug/l	2.0		1
Acetone	6.3		ug/l	5.0		1
Carbon disulfide	ND		ug/l	2.0		1
2-Butanone	ND		ug/l	5.0		1
4-Methyl-2-pentanone	ND		ug/l	5.0		1
2-Hexanone	ND		ug/l	5.0		1
3romochloromethane	ND		ug/l	2.0		1
Tetrahydrofuran	ND		ug/l	2.0		1
2,2-Dichloropropane	ND		ug/l	2.0		1
1,2-Dibromoethane	ND		ug/l	2.0		1
1,3-Dichloropropane	ND		ug/l	2.0		1
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0		1
Bromobenzene	ND		ug/l	2.0		1
n-Butylbenzene	ND		ug/l	2.0		1
sec-Butylbenzene	ND		ug/l	2.0		1
tert-Butylbenzene	ND		ug/l	2.0		1 .
o-Chlorotoluene	ND		ug/l	2.0		1
p-Chlorotoluene	ND		ug/l	2.0		1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0		1
Hexachiorobutadiene	ND	••	ug/l	0.60		1
sopropylbenzene	ND		ug/l	2.0		1
o-Isopropyitoluene	ND		ug/l	2.0		1
Naphthalene	14		ug/l	2.0		1
n-Propylbenzene	ND		ug/l	2.0		1
1,2,3-Trichlorobenzene	ND		ug/l	2.0		1
1,2,4-Trichlorobenzene	ND		ug/l	2.0	***	1
I,3,5-Trimethylbenzene	ND		ug/l	2.0		1
1,2,4-Trimethylbenzene	ND		ug/l	2.0		1



Project Name:

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID: Client ID: L1527533-02

RB-6

47 ELM ST., NORTON

Date Collected:

10/27/15 11:15

Date Received:

10/27/15

Sample Location: 47 ELM ST., NORTO					Field Prep:		Not Specified
Parameter		Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organ	nics - Westborough Lab	Kamirana Kamirana					
Ethyl ether		ND		ug/l	2.0		1
Isopropyl Ether		ND		ug/l	2.0		1
Ethyl-Tert-Butyl-Ether		ND	-	ug/l	2.0		1
Tertiary-Amyl Methyl Ethe	r	ND		ug/l	2.0		1
1,4-Dioxane		ND		ug/l	250		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	95		70-130	
4-Bromofluorobenzene	99		70-130	
Dibromofluoromethane	100		70-130	

Project Name: REED & BARTON

Project Number: 101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-03

Client ID:

RB-5

Sample Location:

47 ELM ST., NORTON

Matrix:

Water

Analytical Method: Analytical Date:

97,8260C 10/29/15 21:57

Analyst:

MS

Date Collected:

10/27/15 14:00

Date Received:

10/27/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westboro	ough Lab		GENESET FOR F			
Methylene chloride	ND ND		ug/l	2.0		1
1,1-Dichloroethane	ND		ug/l	1.0	***	1
Chloroform	ND		ug/l	1.0		1
Carbon tetrachloride	ND		ug/l	1.0		1
1,2-Dichloropropane	ND		ug/l	1.0		1
Dibromochloromethane	ND		ug/l	1.0		1
1,1,2-Trichloroethane	ND		ug/l	1.0		1
Tetrachloroethene .	ND		ug/l	1.0	***	1
Chlorobenzene	ND	Hillion to an annual contract of the latest or the second	ug/l	1.0		1
Trichlorofluoromethane	ND		ug/l	2.0		1
1,2-Dichloroethane	ND		ug/l	1.0		1
1,1,1-Trichloroethane	ND		ug/l	1.0		1
Bromodichloromethane	ND	•	ug/l	1.0		1
trans-1,3-Dichloropropene	ND		ug/l	0.50		1
cis-1,3-Dichloropropene	ND	Constitution of the Constitution	ug/l	0.50		1
1,3-Dichloropropene, Total	ND		ug/l	0.50		1
1,1-Dichloropropene	ND		ug/l	2.0		1
Bromoform	ND		ug/l	2.0		1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0		1
Benzene	ND		ug/l	0.50		1
Toluene	1.0		ug/l	1.0		
Ethylbenzene	ND		ug/l	1.0		1
Chloromethane	ND		ug/l	2.0		1
Bromomethane	ND		ug/l	2.0		1
Vinyl chloride	ND		ug/l	1.0		1
Chloroethane	ND		ug/l	2.0		1
1,1-Dichloroethene	ND		ug/l	1.0		1
trans-1,2-Dichloroethene	ND		ug/l	1.0		1
Trichloroethene	9.7		ug/l	1.0		1
1,2-Dichlorobenzene	ND		ug/l	1.0		1

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-03

Client ID:

RB-5

Sample Location:

DD 6

47 ELM ST., NORTON

Date Collected:

10/27/15 14:00

Date Received:

10/27/15

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborough La	ab					
1,3-Dichlorobenzene	ND		ug/l	1.0		1
1,4-Dichlorobenzene	ND		ug/l	1.0		1
Methyl tert butyl ether	ND		ug/l	2.0		1
p/m-Xylene	ND		ug/l	2.0	 ,	1
o-Xylene	ND		ug/l	1.0		1
Xylene (Total)	ND		ug/l	1.0		1
cis-1,2-Dichloroethene	3.4		ug/l	1.0		1
1,2-Dichloroethene (total)	3.4		ug/l	1.0		1
Dibromomethane	ND		ug/l	2.0		1
1,2,3-Trichloropropane	ND		ug/l	2.0		1
Styrene	ND	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ug/l	1.0		1
Dichlorodifluoromethane	ND		ug/l	2.0		1
Acetone	7.4		ug/l	5.0		1
Carbon disulfide	ND		ug/i	2.0		1
2-Butanone	ND		ug/l	5.0		1
4-Methyl-2-pentanone	ND		ug/l	5.0		1
2-Hexanone	ND		ug/l	5.0		1
Bromochloromethane	ND		ug/l	2.0		1
Tetrahydrofuran	ND		ug/l	2.0		1
2,2-Dichloropropane	ND		ug/l	2.0	-	1
1,2-Dibromoethane	ND		ug/l	2.0		1
1,3-Dichloropropane	ND		ug/l	2.0	*-	1
1,1,1,2-Tetrachloroethane	ND	*	ug/l	1.0		1
Bromobenzene	ND	•	ug/l	2.0		1
n-Butylbenzene	ND	٠	ug/l	2.0		1
sec-Butylbenzene	ND		ug/l	2.0		1
tert-Butylbenzene	ND	and the second second	ug/l	2.0	n+	1
o-Chlorotoluene	ND		ug/l	2.0	w.	1
p-Chlorotoluene	ND		ug/l	2.0		1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0		1
Hexachlorobutadiene	ND		ug/l	0.60	***	1
Isopropylbenzene	ND		ug/l	2.0		1
p-Isopropyltoluene	ND		ug/l	2.0		1
Naphthalene	6.2	* *	ug/l	2.0		1
n-Propylbenzene	ND		ug/l	2.0		1
1,2,3-Trichlorobenzene	ND		ug/l	2.0		1
1,2,4-Trichlorobenzene	ND		ug/l	2.0		1
1,3,5-Trimethylbenzene	ND		ug/l	2.0		1
1,2,4-Trimethylbenzene	ND					1
			~8/·	2.0		



Project Name:

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

Lab ID:

SAMPLE RESULTS

L1527533-03

Client ID:

Sample Location:

RB-5

47 ELM ST., NORTON

Date Collected:

10/27/15 14:00

Date Received:

10/27/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
MCP Volatile Organics - Westborou	gh Lab						
Ethyl ether	ND		ug/l	2.0		1	
Isopropyl Ether	ND		ug/l	2.0		1	
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0		1	
Tertlary-Amyl Methyl Ether	ND	C. C	ug/l	2.0	***	1	
1,4-Dioxane	ND		ug/l	250		1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	99		70-130	
Dibromofluoromethane	101		70-130	

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

Method Blank Analysis Batch Quality Control

Analytical Method:

97,8260C

Analytical Date:

10/29/15 20:39

Analyst:

MS

arameter	Result	Qualifier	Units	RL	MDL
CP Volatile Organics - West	borough Lab for	sample(s):	01-03 I	Batch: WG8	35638-3
Methylene chloride	ND		ug/i	2.0	 .
1,1-Dichloroethane	ND	•	ug/l	1,0	
Chloroform	ND		ug/l	1,0	
Carbon tetrachloride	ND		ug/l	1.0	
1,2-Dichloropropane	ND		ug/l	1.0	
Dibromochloromethane	ND		ug/l	1.0	444
1,1,2-Trichloroethane	ND		ug/l	1.0	
Tetrachloroethene	ND		ug/l	1.0	
Chlorobenzene	ND		ug/l	1.0	
Trichlorofluoromethane	ND		ug/l	2.0	
1,2-Dichloroethane	ND		ug/l	1.0	
1,1,1-Trichloroethane	ND		ug/l	1.0	
Bromodichloromethane	ND		ug/l	1.0	
trans-1,3-Dichloropropene	ND		ug/l	0.50	
cis-1,3-Dichloropropene	ND		ug/l	0.50	
1,3-Dichloropropene, Total	ND		ug/l	0.50	
1,1-Dichloropropene	ND		ug/l	2.0	
Bromoform	ND		ug/l	2.0	e-
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	
Benzene	ND		ug/l	0.50	en de la constant de
Toluene	ND		ug/l	1.0	
Ethylbenzene	ND		ug/l	1.0	***
Chloromethane	ND		ug/l	2.0	
Bromomethane	ND	•	ug/l	2.0	
Vinyl chloride	ND		ug/l	1.0	
Chloroethane	ND		ug/l	2.0	***
1,1-Dichloroethene	ND		ug/l	1.0	4.
trans-1,2-Dichloroethene	ND		ug/l	1.0	
Trichloroethene	ND		ug/l	1.0	



REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

Method Blank Analysis Batch Quality Control

Analytical Method:

97,8260C

Analytical Date:

10/29/15 20:39

Analyst:

MS

nrameter	Result	Qualifier	Units	RL	MDL
CP Volatile Organics - Westb	orough Lab for	sample(s):	01-03 E	atch: WG8	35638-3
1,2-Dichlorobenzene	ND		ug/l	1.0	***
1,3-Dichlorobenzene	ND		ug/l	1.0	***
1,4-Dichlorobenzene	ND		ug/l	1.0	
Methyl tert butyl ether	ND	41511111111111111111111111111111111111	ug/l	2.0	
p/m-Xylene	ND		ug/l	2.0	
o-Xylene	ND		ug/l	1.0	
Xylene (Total)	ND		ug/l	1.0	
cis-1,2-Dichloroethene	ND		ug/l	1.0	
1,2-Dichloroethene (total)	ND		ug/l	1.0	
Dibromomethane	ND		ug/l	2.0	
1,2,3-Trichloropropane	ND	Halli, P	ug/l	2.0	
Styrene	ND		ug/l	1.0	
Dichlorodifluoromethane	ND		ug/l	2.0	The state of the s
Acetone	ND		ug/l	5.0	
Carbon disulfide	ND		ug/l	2.0	
2-Butanone	ND		ug/l	5.0	
4-Methyl-2-pentanone	ND		ug/l	5.0	- · · · · · · · · · · · · · · · · · · ·
2-Hexanone	ND		ug/l	5.0	
Bromochloromethane	ND		ug/l	2.0	
Tetrahydrofuran	ND		ug/l	2.0	
2,2-Dichloropropane	ND		ug/l	2.0	
1,2-Dibromoethane	ND		ug/l	2.0	
1,3-Dichloropropane	ND		ug/l	2.0	
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	
Bromobenzene	ND		ug/l	2.0	
n-Butylbenzene	ND		ug/l	2.0	
sec-Butylbenzene	ND		ug/l	2.0	
tert-Butylbenzene	ND		ug/i	2.0	
o-Chlorotoluene	ND		ug/l	2.0	



REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

Method Blank Analysis Batch Quality Control

Analytical Method:

97,8260C

Analytical Date: Analyst:

MS

10/29/15 20:39

arameter .	Result	Qualifier	Units	RL	MDL
ICP Volatile Organics - Westl	orough Lab for	sample(s);	01-03 E	3atch: WG8	35638-3
p-Chlorotoluene	ND		ug/l	2,0	va
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	
Hexachlorobutadiene	ND		ug/l	0.60	
Isopropylbenzene	ND		ug/l	2.0	
p-Isopropyltoluene	ND		ug/l	2.0	
Naphthalene	ND		ug/l	2.0	***
n-Propylbenzene	ND		ug/l	2.0	
1,2,3-Trichlorobenzene	ND		ug/l	2.0	
1,2,4-Trichlorobenzene	ND		ug/l	2.0	
1,3,5-Trimethylbenzene	ND		ug/l	2.0	
1,2,4-Trimethylbenzene	ND		ug/l	2.0	
Ethyl ether	ND		ug/l	2.0	
Isopropyl Ether	· ND	· · · · · · · · · · · · · · · · · · ·	ug/l	2.0	
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	hu-
1,4-Dioxane	ND		ug/l	250	,

	•	Acceptance				
Surrogate	%Recovery	Qualifier	Criteria			
1,2-Dichloroethane-d4	104		70-130			
Toluene-d8	95		70-130			
4-Bromofluorobenzene	98		70-130			
Dibromofluoromethane	100		70-130			



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

arameter	LCS %Recovery	LCSD Qual %Recovery	%Recov Qual Limits		RPD Qual Limits
ICP Volatile Organics - Westborou	gh Lab Associated sample(s	s): 01-03 Batch: WG835	638-1 WG835638-2		
Methylene chloride	106	104	70-130	2	20
1,1-Dichloroethane	105	107	70-130		20
Chloroform	105	107	70-130	2	20
Carbon tetrachloride	106	110	70-130	1 1 1 2 2 4 7 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20
1,2-Dichloropropane	17. 19.5 11.05 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00 11.00	108	70-130	1945 3 的關	20
Dibromochloromethane	95	99	70-130	4	20
1,1,2-Trichloroethane	94	100	70-130	6	20
Tetrachloroethene	100	100	70-130	0	20
Chlorobenzene	96	98	70-130	111112	20
Trichlorofluoromethane	110	112	70-130	2	20
1,2-Dichloroethane	109	109	70-130	0	20
1,1,1-Trichloroethane	106	//////////////////////////////////////	70-130	10.178.03 3 6.00	20
Bromodichloromethane	108 Lines	108	70-130	0	20
trans-1,3-Dichloropropene	101	103	70-130	7 2 2	20
cis-1,3-Dichloropropene	115 115 115 115 115 115 115 115 115 115	115	70-130		20
1,1-Dichloropropene	104	107	70-130	3	20
Bromoform	90	97 .	70-130	7	20
1,1,2,2-Tetrachioroethane	188 188 188 188 188 188 188 188 188 188	98	70-130	Marking 10	20
Benzene	103	104 104 124 115 115 115 115 115 115 115 115 115 11	70-130		20
Toluene	1979 - 1988 - 1989 - 1980 -	1000 (1000) 90 (1000) (70-130	2	20
Ethylbenzene	95	97	70-130		20



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

rameter	LCS %Recovery Qu	LCSD al %Recovery Q	%Recovery ual Limits	RPD	RPD Qual Limits
P Volatile Organics - Westboro	ugh Lab Associated sample(s):	01-03 Batch: WG835638-	1 WG835638-2		
Chloromethane	1.034.05. 58 0.144.05.	95	70-130	3	20
Bromomethane	98	81	70-130	.19	20
Vinyl chloride	105	105	70-130	0	20
Chloroethane	102	103	70-130		20
1,1-Dichloroethene	106	108	70-130	2	20
trans-1,2-Dichloroethene	105	106	70-130		20
Trichloroethene	A. N. 106	108	70-130	2	20
1,2-Dichlorobenzene	94	94 (7.17)	70-130	0	20
1,3-Dichlorobenzene	93/1/1999 93/1/1999 P	95	70-130	// 2 3 1 1	20
1,4-Dichlorobenzene	94	93	70-130		20
Methyl tert butyl ether	104 104	112	70-130	7	20
p/m-Xylene	96	99	70-130	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	20
o-Xylene	96	98	70-130	12	20
cis-1,2-Dichloroethene	106	107	70-130	10 10 10 10 10 10 10 10 10 10 10 10 10 1	20
Dibromomethane	109	110	70-130		20
1,2,3-Trichioropropane	93 11 11	100	70-130		20
Styrene	######## 97 ############################	100	. 70-130	3	20
Dichlorodifluoromethane	**************************************	20000000000000000000000000000000000000	70-130	Danish Armondis	20
Acetone		123 P. F. F.	70-130		20
Carbon disulfide	7, 402	103	70-130		20
2-Butanone	101	116	70-130	14	20



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
MCP Volatile Organics - Westboroug	gh Lab. Associated sampl	e(s): 01-0	3 Batch; WG8356	638-1 W	G835638-2				
4-Methyl-2-pentanone	103		131917 .19		70-130	Type P Law County Count		20	
2-Hexanone	89		102		70-130	14		20	
Bromochloromethane	114		112		70-130	2 		20	
Tetrahydrofuran	114		122		70-130	W 7		20	
2,2-Dichloropropane	133 (6. 47.8	Q	136	Q	70-130	2 2		20	
1,2-Dibromoethane	15 25 97 12 198 1		72 102		70-130	1. Eggi 1. 5		20	
1,3-Dichloropropane	15 July 19 96 July 19 19 19 19 19 19 19 19 19 19 19 19 19		100		70-130	4		20	
1,1,1,2-Tetrachloroethane	### ## 95 particular		98	•••	70-130	**************************************		20	
Bromobenzene	Figure 91		93		70-130	2		20	
n-Butylbenzene	97		98		70-130			20	
sec-Butylbenzene	94		96 177 143		70-130	2.000		20	
tert-Butylbenzene	92		4 of 1 of		70-130			20	
o-Chlorotoluene	93	** ** *	93		70-130	0		20	
p-Chlorotoluene	93		94		70-130			20	,
1,2-Dibromo-3-chloropropane	(100 hall) 87 - 1 - 1		100		70-130	14.11		20	
Hexachlorobutadiene	1996		98		70-130	2.5		20	
Isopropylbenzene	41 97 41 11		1839 A 183 99 A 1810 E 183		70-130	2		20	
p-lsopropyltoluene	1951 1951 1951 1951 1951 1951 1951 1951		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		70-130			20	
Naphthalene	mineral martin and the second of the second later to the second of the s	•	400		70-130		**	20	
n-Propylbenzene	94		115 35 95 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		70-130	Arrian Principal Constitution Con-		20	
1,2,3-Trichlorobenzene	95		Francisco (2 97)		70-130	2.00		20	



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
MCP Volatile Organics - Westborou	gh Lab Associated sampl	e(s): 01-0	3 Batch: WG835	638-1 W	G835638-2				
1,2,4-Trichlorobenzene	98		98		70-130	0		20	
1,3,5-Trimethylbenzene	92		95		70-130	20/04to:/ 3 0555(6)-01		20	
1,2,4-Trimethylbenzene	93		95		70-130	0.00 2 20 0.00	***************************************	20	
Ethyl ether	107				70-130	A		20	debit care to the three boards on
Isopropyl Ether	104		108		70-130			20	
Ethyl-Tert-Butyl-Ether	105		109		70-130	:::::: 4 ::::::::::::::::::::::::::::::		20	1 Print 1971 L. 1984 L. 1984 W. 1974 P. 1984
Tertiary-Amyl Methyl Ether	102		107		70-130	5999		20	
1,4-Dioxane	40	Q	158	Q	70-130	119	Q	20	

	LCS		LCSD		Acceptance
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	95		95		70-130
4-Bromofiuorobenzene	99		99		70-130
Dibromofluoromethane	99		102		70-130

METALS



Project Name: Project Number: **REED & BARTON**

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-04

Client ID:

RB-SED-1

Sample Location:

47 ELM ST., NORTON

Matrix:

Percent Solids:

Soil

47%

Date Collected:

10/27/15 10:00

Date Received:

10/27/15

Field Prep:

Not Specified

-	A I 41 I	

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Method	Analyst
MCP Total Metals	s - Westbor	ough Lab							The state of the s		
Arsenic, Total	20		mg/kg	0.84	·	1	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	JḤ
Barium, Total	92		mg/kg	0.84		1	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	JH
Cadmium, Total	ND		mg/kg	0.84		111	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	, JH
Chromium, Total	17		mg/kg	0.84		1	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	JH
Lead, Total	33		mg/kg	4.2		1	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	ΊĤ
Mercury, Total	1.57		mg/kg	0.139		1	10/28/15 07:45	5 10/28/15 15:10	EPA 7471B	97,7471B	DB
Selenium, Total	ND		mg/kg	4.2		1	10/28/15 02:57	7 10/28/15 12:39	EPA 3050B	97,6010C	JH
Silver, Total	, ND		mg/kg	0.84		1	10/28/15 02:57	10/28/15 12:39	EPA 3050B	97,6010C	JH

Project Name:

REED & BARTON

Lab Number:

L1527533

10/30/15

Project Number: 101726.00

Report Date:

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
MCP Total Metals =	Westborough Lab. for s	ample(s):	04 Bat	ch: W0	834823-1	ige schunge (ilige e) As stand			HENRY CHARGOS
Arsenic, Total	ND	mg/kg	0.40		1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Barium, Total	ND	mg/kg	0.40		1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Cadmium, Total	ND	mg/kg	0.40		1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Chromium, Total	ND	mg/kg	0.40	**	1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Lead, Total	ND	mg/kg	2.0	to at	1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Selenium, Total	ND	mg/kg	2.0		1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH
Silver, Total	ND	mg/kg	0.40		1	10/28/15 02:57	10/28/15 11:29	97,6010C	JH

Prep Information

Digestion Method:

EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method Analys
MCP Total Metals - W	/estborough Lab. for sa	ımple(s):	04 Bat	ch: WG	834831-1	Markharonya (h. 1881). Ezaeta alaregoa (h. 1881).		
Mercury, Total	ND	mg/kg	0.083		. 1	10/28/15 07:45	10/28/15 14:4	7 97,7471B DB

Prep Information

Digestion Method:

EPA 7471B



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
MCP Total Metals - Westborough Lab	Associated sample(s): 04	Batch:	WG834823-2 WG	834823-3	SRM Lot Number:	D088-540			
Arsenic, Total	105		105		79-121	0.0		30	
Barium, Total	110		99		83-117	11		30	
Cadmium, Total	107		107		83-117	0		30	
Chromium, Total	110		110		80-120	0		30	
Lead, Total	98		. 98		81-117	0 110		30	
Selenium, Total	108		108		78-122	0.44		30	
Silver, Total	110		108		75-124	2		30	
MCP Total Metals - Westborough Lab	Associated sample(s): 04	Batch:	WG834831-2 WG	834831-3	SRM Lot Number:	D088-540			
Mercury, Total	100		103		72-128	18608		30	

INORGANICS & MISCELLANEOUS



Project Name:

REED & BARTON

Project Number: 101726.00

Lab Number:

L1527533

Report Date:

10/30/15

SAMPLE RESULTS

Lab ID:

L1527533-04

Client ID:

RB-SED-1

Sample Location:

47 ELM ST., NORTON

Matrix:

Soil

Date Collected:

10/27/15 10:00

Date Received:

10/27/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westl Solids, Total	oorough Lat 47.2	D	%	0.100	NA	1		10/27/15 19:27	30,2540G	RT

Project Name:

REED & BARTON

Project Number: 101726.00

Lab Number: L1527533

Report Date: 10/30/15

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information Custody Seal

Cooler

Α

Absent

Container Info	rmation		Temp				
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1527533-01A	Vial HCI preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-01B	Vial HCI preserved	Α	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1527533-01C	Vial HCI preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-02A	Vial HCl preserved	Α	N/A	2.3	Y	Absent	MCP-8260-10(14)
L1527533-02B	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-02C	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-03A	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-03B	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-03C	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	MCP-8260-10(14)
L1527533-04A	Glass 120ml/4oz unpreserved	А	N/A	2.3	Y	Absent	MCP-CR-6010T-10(180),MCP-AS-6010T-10(180),MCP-7471T-10(28),MCP-CD-6010T-10(180),MCP-AG-6010T-10(180),MCP-SE-6010T-10(180),MCP-BA-6010T-10(180),MCP-PB-6010T-10(180)
L1527533-04B	Plastic 2oz unpreserved for TS	Α	N/A	2.3	Ý	Absent	TS(7)
L1527533-05A	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	HOLD-8260(14)
L1527533-05B	Vial HCl preserved	Α	N/A	2.3	Υ	Absent	HOLD-8260(14)

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes
or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate; Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable,

NP Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

TIC

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report



Project Name:

REED & BARTON

Lab Number:

L1527533

Project Number:

101726.00

Report Date:

10/30/15

Data Qualifiers

- Co-elution; The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H . The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1527533

Report Date:

10/30/15

REFERENCES

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 2

Published Date: 9/28/2015 10:34:24 AM

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide) (soil), Methyl methacrylate (soil),

Azobenzene.

EPA 8270D: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

EPA 8270D: Biphenyl. EPA 2540D: TSS

EPA TO-15: Halothane, 2.4.4-Trimethyl-2-pentene, 2.4.4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene,

Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200,8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Ti; EPA 200,7: Ba, Be, Ca, Cd, Cr, Cu, Na; EPA 245,1: Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C,

SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.

Non-Potable Water

EPA 200.8: Al.Sb.As.Be.Cd.Cr.Cu.Pb.Mn.Ni.Se.Aq.Tl.Zn:

EPA 200.7; Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mq,Mn,Mo,Ni,K,Se,Aq,Na,Sr,Ti,Tl,V,Zn;

EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC,

SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F,

EPA 353.2: Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,

SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics.

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,

Endosulfan I. Endosulfan II. Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Collert-QT; Enterolert-QT, SM9222D-MF.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

			4 7 4	Serial_No:10301512:29
ΔίΡΗΑ	CHAIN OF	CUSTODY	PAGEOF	Dafe Rec'd in Lab: 10/29/15 ALPHA Job #: (152.753)
8 Walkup Drive	320 Forbes Blvd	Project Information		Report Information - Data Deliverables Billing Information
Westboro, MA 0 Tel: 508-898-93		Project Name: Reed (Borton	☐ ADEx ☐ EMAIL ☐ Same as Client info PO #:
Client Informatio		Project Location: 47 Elm	St. Norton	Regulatory Requirements & Project Information Requirements
Client: Mass O	EP,	Project#: 101726.	00	☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods ☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
	iverside Orive	Project Manager: Elliott	Touches	☐ Yes ☑ No GW1 Standards (Info Required for Metals & EPH with Targets) ☐ Yes ☑ No NPDES RGP
	MA 02347	ALPHA Quote #:		□ Other State /Fed Program Criteria
1	946-2786	Turn-Around Time		
	ncobs e state ma. os roject Information:	□Standard t VRUSH∞ Date Due: 10/30/2	y continued it pre-approvedi) O 15	ANALYSIS ANALYS AN
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date Time	Sample Samp Matrix Initia	pler ON STATE Sample Comments also
	04-4-4	Date Itilie	Who so	
20010	00 7	12/2011/11/11		
27533-01		11112(176)		
02	<u>RB-6</u>	10/27/15 12:00	1	
<i>0</i> 5	RB-5	10/27/15 2:0	D WATER ES	95 / 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
L			<u> </u>	
The second secon		<u> </u>		
mail a sala na Januara na paga na manana na paga na manan di dalahara			<u></u>	
04	RB-SED-1	10/27/15/10:00	Sediment GA	RST V
Container Type P= Plastic	Preservatīve A= None		Container Ty	уре
A= Amber glass V= Viat G≃ Glass	B= HCI C= HNO ₃ D= H ₂ SO ₄		Preservat	
B= Bacteria cup C≃ Cube O≃ Other	E= NaOH F= MeOH G= NaHsO	Relinquished By:	The state of the s	Received By: Date/Time All samples submitted are subject to
E= Encore D= BOD Bottle	H = Na ₂ S ₂ O ₃ I= Ascorbic Acid J = NH ₄ CI K= Zn Acetate		10-27-13	All samples submitted are subject to Alpha's Terms and Conditions. See reverse side. FORM NO. 01-01 (rev. 12-Mar-2012)
	O= Other			

Send to Selected Lab					
Tas	k Order fo	r Laboratory Assistance		k Order (CO # 0)	
includes <u>Attachmer</u>	1 <u>1 1</u> that provide	MassDEP Bureau of Waste Site Cleanup - I s the list of analytes for this order; Attachment 2 that provide		Support Costs" for this order.	
LSS Contract Lab	oratory	Alpha Analytical, Inc., 8 Walkup Drive, Wes	tborough, MA 01681	Attn: James Occhialini	
Lab Phone, Fax,	e-mail	Phone: 508-380-8618 Fax: 508-898	-9220 emali jocchlalin	i@aiphalab.com	
DEP Requestor (name):	Elliot Jacobs	DEP Order Date:	19-Oct-2015	
RTN Number(s), If a	ppiloable		DEP Proj. No.	101726.00	
Type of Ord	er	Date	DEP POC	Elliot Jacobs	
Initial Budget		19-Oct-15	DEP Region	\$ERO	
Site/Proj Name / Address:	1	ite Discovery - 47 Elm Street Norton	Ph. # POC: s-mall POC:	508-946-2786 elliot.jacobs@state.ma.us	
		Approved Budget Summary			
DEP Cost Adjustments (Non-analytical)		Initial (CO # 0) = \$ 0	Total Cost Adjustments	\$0.00	
\$ This Order Only		History of Budget Changes	Total A	pproved Budget	
\$2,278.50	Initial (CO # 0) = \$ 2278.5 \$2,278.50			2,278.50	
Summary of Samp	oles to be A	nalvzed			
# Samples This Order Only	History of # Samples Sent for Analysis Total Approved Samples for				
34	Initial (CO # 0)= 34 34				
Summary of Analy	ses (see A	nalyte Order Sheet for Required Analyses)			
# Analyses This Order	. History of # Analysis for this Project Total Approved Analysis for this Project				
34	Initial (CO#	0) = 34	34		
		Environmental media of the sam	ples		
Water (groundwater) /	/ Sediment /				
		Additional information and/or special in	nstructions.		
		786 to confirm sampling date and coordinate comples for metals Cu, Ni, Ag by 6010.	ntainer drop off/sam	ple pick up. 16 GW samples	
Contrac	t Status of	Ordered Analyses and Description of Ap	proved Non-Con	tract Analyses	
		All analyses in the approved unit price list.	lot Applicable		
		rt Transmittal Information (E-mail or We	bsite Postling Opt	ional)	
Send Data Analys following I	sis/Report to DEP Person:	Same as PO	C listed above.		
Address of DEP repo	ort recipient:	Same as PO	C listed above.		
	<u> </u>	Invoice Instructions			
Lab to Submit Origin	to:	MA Department of Environmental Protection, One Winter Street, Boston, Massachusetts 0210 Attn: Cathy Kiley (6th FI)	8		
E-mail or hard copies		cathy.kiley@state.ma.us and	d ap.madepbwsc@str	ate.ma.us	
MassDEP Authoriz		al for this Order	Date:	10/20/13	
	·		·	the state of the s	

Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1527533

Instrument ID: Voal16.i Calibration Date: 29-OCT-2015 Time: 19:20

Lab File ID: 1029001

Init. Calib. Date(s): 15-OCT-2 16-OCT-2

Sample No: 8260 CCAL

Init. Calib. Times : 22:02

00:38

Compound		RRF	MIN RRF		MAX %D	
dichlorodifluoromethane		.23096			20	
		.33664				
chloromethane					20	
vinyl chloride	.2682				20	
bromomethane	15076	.10304 .16211			20	,
chloroethanetrichlorofluoromethane			- L		20	
	.37453	.41097				
ethyl ether 1,1,-dichloroethene		.14198			20	
1,1,-dichloroethene		.23073			20	
carbon disulfide		.70054			20	
freon-113	.23019				20	
freon-113 iodomethane		.02612			20	
acrolein		.02985		3	20	
methylene chloride		.25978		6	20	
acetone	100				20	
trans-1,2-dichloroethene		,25535			20	
methyl acetate		.18173			20	
methyl acetate methyl tert butyl ether		.70863			20	
tert-butyl alcohol		.01352	.05		20	
tert-butyl alcohol Diisopropyl Ether	1.0548	1.0944	.05		20	
1,1-dichloroethane	.48211	.50479	.2	5	20	
Halothane	.20262	.20987	.05	4	20	
acrylonitrile		.09383	.05	3	20	
Ethyl-Tert-Butyl-Ether	.89501	.93703	.05	5	20	
and an Indiana.	.73353	.76032	.05	4	20	
cis-1,2-dichloroethene	.26974	.28567	.1		20	
2,2-dichloropropane	,3212	.4269	.05	33	20	F
cvclohexane	.41693	.41911	.01	1	30	
bromochloromethane		.10512	.05	14	20	
chloroform	.33393		.2	5	20	
	0000	.20939		0	20	
ethyl acetate carbontetrachloride	.28367				20	
	1 100	114	05	14	20	
tetrahydrofuran 1,1,1-trichloroethane	30574	.32447	.1		20	
	.08317	.08441	.1		20	
2-butanone 1,1-dichloropropene	.25233				20	
benzene		.79517	.5		20	
Tertiary-Amyl Methyl Ether		.57024			20	
1,2-dichloroethane	.25555		.03	9	20	

FORM VII MCP-8260-10

CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1527533

Instrument ID: Voal16.i Calibration Date: 29-OCT-2015 Time: 19:20

Lab File ID: 1029001

Init. Calib. Date(s): 15-OCT-2 16-OCT-2

Sample No: 8260 CCAL Init. Calib. Times : 22:02

00:38

			MIN		MAX	1
Compound	RRF	RRF	RRF	%D	%D	
	=====	=====	t	j	====	
methyl cyclohexane	.34905	.36973			30	_
trichloroethene	.19956				20	F
dibromomethane	.1082			9	20	
1,2-dichloropropane	.22784			5	20	
bromodichloromethane	.28728			8	20	
1,4-dioxane	.00043			-60	20	F
2-chloroethylvinyl ether	.11226		.05	15	20	
cis-1,3-dichloropropene	.32726	.3766	.2	15	20	
toluene	.65036	.57484	. 4	-12	20	
4-methyl-2-pentanone	.06859	.07055	.1	3	20	F
tetrachloroethene	.25885	.25789		. 0	20	
tetrachloroethene trans-1,3-dichloropropene	.33573	.33818	.1	1	20	
1,1,2-trichloroethane	.1643		.1	-6	20	
ethyl-methacrylate	.30226	.27497	.01	-9	20	
chlorodibromomethane	.25583	.24395	.1	-5	20	
1,3-dichloropropane	.33992		.05	-4	20	
1,2-dibromoethane	.20136		.1	-3	20	
2-hexanone	.16852		.1	- 1, 1,	20	
chlorobenzene	.68998	.66202	.5	-4	20	1
ethyl benzene		1.1126	.1	1	20	
1,1,1,2-tetrachloroethane		.24415	.05	-5	20	
p/m xylene	.45685		.1	-4	20	
o xylene	.43767		.3	-4	20	
styrene	.70775		.31	-3	20	
bromoform	.29415		.1	-10	20	
isopropylbenzene	1.1817			-3	20	
bromobenzene	4	.49424		-9	20	
n-propylbenzene		2.4525	.05	-6	20	
1,4-dichlorobutane	.84404		.01	-8	20	
1,1,2,2,-tetrachloroethane	.46433		.3	-11	20	
4-ethyltoluene		1.1005	.05	6	20	
2-chlorotoluene		1.4905	.05	-7	20	
1,2,3-trichloropropane		.34233	.05	-7	20	
1,3,5-trimethybenzene		1.7315	.05	-8	20	
trans-1,4-dichloro-2-butene	.16209		.05	- 8 1	20	
				_ _ 7		
4-chorotoluene	1	1.4692	.05	,	20	
tert-butylbenzene	1.6633	1.5391	.05	-7	20	
1,2,4-trimethylbenzene	1.8790	1.7435	.05	-7.	20	
	l					

FORM VII MCP-8260-10

7A CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1527533

Instrument ID: Voal16.i Calibration Date: 29-OCT-2015 Time: 19:20

Sample No: 8260 CCAL Init. Calib. Times : 22:02 00:38

	•				···
G	RRF	RRF	MIN	%D	MAX %D
Compound	KKF	KKF ======	RRF		====
	2.4609	2.3226	.05	-6	20
sec-butylbenzene	2.4609		.05	-5	20
p-isopropyltoluene	1.0485	.97935		-5 -7	20
1,4-dichlorobenzene			.6	-6	20
r, 4-dichioropenzene	1.0493	.98357	.5	- 6 5	20
p-diethylbenzene	1.8556	1.8048		-3	20
n-butylbenzene	.97482	.91896	.05	- 3 - 6	20
1,2-dichlorobenzene	.86024	.90567	.4	- 6 5	20
1,2,4,5-tetramethylbenezene		.06754	.05	-13	20
1,2-dibromo-3-chloropropane	.078			-13 -6	
1,3,5-trichlorobenzene hexachlorobutadiene	.75084	.70382	.01	- 6 - 4	30
1,2,4-trichlorobenzene	.31185	.29997	,05 ,2	-4 -2	20 20
	1.6361		.∠ .05	-∠ -7	20
naphthalene	.61723	.58839	.05	- / - 5	20
1,2,3-trichlorobenzene	.61/23				20
dibromofluoromethane			.05	====	
	.257			-1	20
1,2-dichloroethane-d4	.2839	.2943 1.1675	.05	4	20
toluene-d8			.05	-5	20
4-bromofluorobenzene	.94189	.92978	.05	- 1.	20
	 				
				·	
·					
PART TO THE PART T					

FORM VII MCP-8260-10



ANALYTICAL REPORT

Lab Number:

L1528136

Client:

Massachusetts DEP

20 Riverside Drive

Lakeville, MA 02347-1676

ATTN:

Elliot Jacobs

Phone:

(508) 946-2786

Project Name:

REED & BARTON

Project Number:

101726.00

Report Date:

11/06/15

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1528136-01	RB-9	WATER	47 ELM ST., NORTON	10/30/15 11:00	10/30/15
L1528136-02	RB-SM-1	WATER	47 ELM ST., NORTON	10/30/15 11:30	10/30/15

REED & BARTON

Lab Number:

L1528136

11/06/15

Project Number: 101726.00

Report Date:

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An af	firmative response to questions A through F is required for "Presumptive Certainty" status	
Α	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
В	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
С	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
Eb.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A re	A response to questions G, H and I is required for "Presumptive Certainty" status						
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES					
Н	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO					
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES					

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

11/06/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.



Project Name:

REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

Case Narrative (continued)

MCP Related Narratives

Volatile Organics

In reference to question H:

The initial calibration, associated with L1528136-01 and -02, did not meet the method required minimum response factor on the lowest calibration standard for 1,4-dioxane (0.00205), as well as the average response factor for 1,4-dioxane.

The continuing calibration standard, associated with L1528136-01 and -02, is outside the acceptance criteria for several compounds; however, it is within overall method allowances. A copy of the continuing calibration standard is included as an addendum to this report.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Kuis L. Water Lisa Westerlind

Title: Technical Director/Representative

Date: 11/06/15



ORGANICS



VOLATILES



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

11/06/15

SAMPLE RESULTS

Lab ID:

L1528136-01

Client ID:

RB-9

Sample Location:

47 ELM ST., NORTON

Matrix:

Water

Analytical Method:

97,8260C

Analytical Date:

11/05/15 14:41

Analyst:

MM

Date Collected:

10/30/15 11:00

Date Received:

10/30/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westboro	ugh Lab					
Methylene chloride	ND		ug/l	2.0		1
1.1-Dichloroethane	ND		ug/l	1.0		1
Chloraform ,	ND		ug/l	1.0	••	1
Carbon tetrachioride	ND		ug/l	1.0	***	1
,2-Dichloropropane	ND		ug/l	1.0		1
Dibromochloromethane	ND		ug/l	1.0	**	1
,1,2-Trichioroethane	ND		ug/l	1.0		1.
etrachloroethene	ND	•	ug/l	1.0		1
Chlorobenzene	ND	,	ug/l	1.0		1
richlorofluoromethane	ND		ug/l	2.0		1
,2-Dichloroethane	ND		ug/l	1.0		1
,1,1-Trichloroethane	ND		ug/l	1.0		1
romodichloromethane	ND		ug/l	1.0		1
ans-1,3-Dichloropropene	ND	***	ug/l	0.50	**	1
is-1,3-Dichloropropene	ND		ug/l	0.50		1
3-Dichloropropene, Total	ND		ug/l	0.50		1
,1-Dichloropropene	ND		ug/l	2.0		1
romoform	ND		ug/l	2.0		1
1,2,2-Tetrachloroethane	ND		ug/l	1.0		1
enzene	ND		ug/l	0.50		1
oluene	ND		ug/l	1.0		1
thylbenzene	ND		ug/l	1.0		1
hloromethane	ND		ug/l	2.0		1
romomethane	ND		ug/l	2.0		1
Inyl chloride	ND		ug/l	1.0		1
hioroethane	ND		ug/l	2.0		1
1-Dichloroethene	ND		ug/l	1.0	***	1
ans-1,2-Dichloroethene	ND		ug/l	1.0		1
Ichloroethene	ND	*****	ug/l	1.0		1
2-Dichlorobenzene	ND		ug/l	1.0		1



Project Name:

REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

SAMPLE RESULTS

Lab ID:

L1528136-01

Client ID:

Sample Location:

RB-9

47 ELM ST., NORTON

Date Collected:

10/30/15 11:00

Date Received:

Field Prep:

Not Specified

10/30/15

1,3 DeNotorobanzene ND ugl 1,0 - 1 1,4 Dichlorobanzene ND ugl 1,0 - 1 1,4 Dichlorobanzene ND ugl 2,0 - 1 1,4 Dichlorobanzene ND ugl 2,0 - 1 1,5 Dichlorobanzene ND ugl 1,0 - 1 1,5 Dichlorobanzene ND ugl 2,0 - 1 1,5 Dichlorobanz	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
1.4-Dichickobenzene ND ugfl 1.0 - 1 Merby terber bulyl ether ND ugfl 2.0 - 1 Merby terber bulyl ether ND ugfl 2.0 - 1 x-Xylene ND ugfl 1.0 - 1 x-Xylene (Total) ND ugfl 1.0 - 1 x-Xylene (Total) ND ugfl 1.0 - 1 1.2-Dichlorosthone ND ugfl 1.0 - 1 1.2-Dichlorosthone (total) ND ugfl 1.0 - 1 1.2-X-Tirchloropropane ND ugfl 2.0 - 1 1.2-X-Tirchloropropane ND ugfl 2.0 - 1 Styrone ND ugfl 2.0 - 1 Acaton ND ugfl 2.0 - 1 Acaton ND ugfl 2.0 - 1 Carbon	MCP Volatile Organics - Westborough Lab				400			
1.4. Dichlorobanzene 1.6. Dichlorobanzene 1.6. Dichlorobanzene 1.7. Dichlorobanzene 1.8. Dich	1,3-Dichlorobenzene	ND	portion of the 25 Armond Const.	ug/l	1.0		1	
Mellyl lart bulyl either ND ugfl 2.0 - 1 Month-yelon	1,4-Dichlorobenzene	ND			1.0		1	
Definity Systems ND	Methyl tert butyl ether	ND			2.0		1	
c-Xylene ND ugfl 1.0 - 1 Xylene (Total) ND ugfl 1.0 - 1 Xylene (Total) ND ugfl 1.0 - 1 L1-2-Dicklorosthone (total) ND ugfl 1.0 - 1 Dicklorosthone (total) ND ugfl 2.0 - 1 12-3-Ticklorosthone (total) ND ugfl 2.0 - 1 12-3-Ticklorosthone (total) ND ugfl 2.0 - 1 Styrone ND ugfl 2.0 - 1 Dicklorosthone (total) ND ugfl 2.0 - 1 Acatron ND ugfl 2.0 - 1 Carbon distalfer ND ugfl 2.0 - 1 2-Ustranone ND ugfl 2.0 - 1 2-Ustranone ND ugfl 2.0 - 1 1-Estratione <td>p/m-Xytene</td> <td>ND</td> <td></td> <td>-</td> <td>2.0</td> <td></td> <td>1</td> <td></td>	p/m-Xytene	ND		-	2.0		1	
Xylene (Total) ND ug/l 1,0 - 1 cis-1,2-Dichlorostheno ND ug/l 1,0 - 1 cis-1,2-Dichlorostheno (total) ND ug/l 1,0 - 1 Dick concentration ND ug/l 2,0 - 1 1,2,3-Trichleropropana ND ug/l 2,0 - 1 Styrene ND ug/l 1,0 - 1 Corbon disulfide ND ug/l 5,0 - 1 Carbon disulfide ND ug/l 5,0 - 1 Carb	o-Xylene	ND			1.0		1	
NO	Xylene (Total)	ND	•		1.0		1	
1,2-Dichloroethene (total) ND ugil 1,0 - 1 Dichomorethane ND ugil 2,0 - 1 1,2,3-Trichtoropropane ND ugil 2,0 - 1 Skyrene ND ugil 1,0 - 1 Dichlorodifloromethane ND ugil 2,0 - 1 Acetone ND ugil 5,0 - 1 Cerbon disulfide ND ugil 5,0 - 1 2-Butanone ND ugil 5,0 - 1 2-Hasanone ND ugil 2,0 - 1 2-Hasanone ND ugil <td>cis-1,2-Dichloroethene</td> <td>ND</td> <td>• •</td> <td></td> <td>1.0</td> <td></td> <td>1</td> <td></td>	cis-1,2-Dichloroethene	ND	• •		1.0		1	
Dibromomethane ND	1,2-Dichloroethene (total)	ND		-	1.0		1	
1.2.3-Trichiloropropanie ND	Dibromomethane	ND	•		2.0		1	
Styrene ND ug/l 1.0 - 1 Dichlordiffluoromethane ND ug/l 2.0 - 1 Acetone ND ug/l 5.0 - 1 Carbon disulfide ND ug/l 5.0 - 1 2-Eutanone ND ug/l 5.0 - 1 4-Methyl-2-pentanone ND ug/l 5.0 - 1 2-Hexanone ND ug/l 2.0 - 1 Bromochioromethane ND ug/l 2.0 - 1 12-Dibromochiane ND ug/l 2.0 - 1 1,2-Dibromochiane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1,12-Tertaedinorethane ND ug/l 2.0 - 1 1,2-Dibromochiane ND ug/l 2.0 - 1 1,2-Tertaedinorethane <td>1,2,3-Trichloropropane</td> <td>ND</td> <td></td> <td></td> <td>2.0</td> <td></td> <td>1</td> <td></td>	1,2,3-Trichloropropane	ND			2.0		1	
Dickloradifluoromethane ND ug/l 2.0 - 1	Styrene	ND			1.0		1	
Carbon disulfide ND ug/l 2.0 1 2-Butanone ND ug/l 5.0 1 4-Methyl-2-pentanone ND ug/l 5.0 1 2-Hexanone ND ug/l 5.0 1 Bromochloromethane ND ug/l 2.0 1 Tetrahydrofuran ND ug/l 2.0 1 2,2-Dichloropropane ND ug/l 2.0 1 1,2-Dibromethane ND ug/l 2.0 1 1,1-1,2-Tetrachloroethane ND ug/l 2.0 1 1,1-1,1-2-Tetrachloroethane ND ug/l 2.0 <	Dichlorodifluoromethane	ND			2.0		1	•
2-Butanone ND ug/l 5.0 1	Acetone	ND		ug/l	5.0		1	
ND	Carbon disulfide	ND		ug/l	2.0	, 	1	
2-Hexanone ND	2-Butanone	ND		ug/l	5.0		1	
2-Hexanone ND ug/l 5.0 1 Bromochloromethane ND ug/l 2.0 1 Tetrahydrofuran ND ug/l 2.0 1 2,2-Dichloropropane ND ug/l 2.0 1 1,2-Dibromoethane ND ug/l 2.0 1 1,1-1,2-Tetrachloroethane ND ug/l 2.0 1 1,1-1,12-Tetrachloroethane ND ug/l 2.0 1 Bromochenzene ND ug/l 2.0 1 Bromochenzene ND ug/l 2.0 1 Bromochenzene ND ug/l 2.0 1 Bee-Bulylbenzene ND ug/l 2.0 1 Beer-Bulylbenzene ND ug/l 2.0 1 Ber-Bulylbenzene ND ug/l 2.0 1 <t< td=""><td>4-Methyl-2-pentanone</td><td>ND</td><td>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</td><td>ug/l</td><td></td><td></td><td>1</td><td></td></t<>	4-Methyl-2-pentanone	ND	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ug/l			1	
Tetrahydrofuran	2-Hexanone	ND					1	
2,2-Dichloropropane ND ug/l 2,0 1 1,2-Dibromoethane ND ug/l 2,0 1 1,3-Dichloropropane ND ug/l 2,0 1 1,1,1,2-Tetrachloroethane ND ug/l 1,0 1 Bromobenzene ND ug/l 2,0 1 n-Butylbenzene ND ug/l 2,0 1 n-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1	Bromochloromethane	ND			2.0		1	
1,2-Dibromeethane ND ug/l 2,0 1 1,3-Dibhloropropane ND ug/l 2,0 1 1,1,1,2-Tetrachloroethane ND ug/l 1,0 1 Bromobenzene ND ug/l 2,0 1 Bromobenzene ND ug/l 2,0 1 n-Bulylbenzene ND ug/l 2,0 1 sec-Bulylbenzene ND ug/l 2,0 1 tetr-Bulylbenzene ND ug/l 2,0 1 cetr-Bulylbenzene ND ug/l 2,0 1 <td< td=""><td>Tetrahydrofuran</td><td>ND</td><td></td><td>ug/l</td><td>2.0</td><td></td><td>1</td><td></td></td<>	Tetrahydrofuran	ND		ug/l	2.0		1	
1.3-Dichloropropane ND ug/l 2.0 1 1.1,1,2-Tetrachloroethane ND ug/l 1.0 1 Bromobenzene ND ug/l 2.0 1 n-Bulylbenzene ND ug/l 2.0 1 sec-Bulylbenzene ND ug/l 2.0 1 tetr-Bulylbenzene ND ug/l 2.0 1	2,2-Dichloropropane	ND		ug/l	2.0	pi-4	1	
1,1,1,2-Tetrachloroethane ND ug/l 1.0 1 Bromobenzene ND ug/l 2.0 1 n-Butylbenzene ND ug/l 2.0 1 see-Butylbenzene ND ug/l 2.0 1 see-B	1,2-Dibromoethane	ND		ug/l	2.0		1	
ND	1,3-Dichloropropane	ND	on and a supplied distance of the	ug/l	2.0		1	think and and
ND	1,1,1,2-Tetrachloroethane	ND		ug/l	1.0		1	
Sec-Butylbenzene ND	Bromobenzene	ND		ug/l	2.0		1	
ND	n-Butylbenzene	ND		ug/l	2.0		4	
ND	sec-Butylbenzene	ND		ug/l	2.0		1	•
P-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 P-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 N-Propylbenzene ND ug/l 2.0 1	tert-Butylbenzene	ND	V 1.00 (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997) (1997)	ug/l	2.0		4	
1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	o-Chlorotoluene	ND		ug/l	2.0		1	
Hexachlorobutadiene	p-Chlorotoluene	ND		ug/l	2.0		1	
Sopropylbenzene	1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	***	1	
ND Ug/l 2.0 1 Naphthalene ND Ug/l 2.0 1 ND Ug/l ND Ug/l 2.0 1 ND Ug/l Ug/l ND Ug/l ND Ug/l Ug/l Ug/l ND Ug/l U	Hexachlorobutadiene	ND		ug/l	0.60		1	
Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	isopropylbenzene	ND		ug/l	2.0		1	
n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	p-Isopropyltoluene	ND		ug/l	2.0		1	Milliani nevin
1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	Naphthalene	ND			2.0		1	
1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	n-Propylbenzene	NĐ			2.0		1	
1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	1,2,3-Trichlorobenzene	ND			2.0		1	
1,3,5-Trimethylbenzene ND ug/l 2.0 1	1,2,4-Trichlorobenzene	ND			2.0	***	1	
	1,3,5-Trimethylbenzene	ND	THE RESIDENCE OF THE PROPERTY		2.0		1	
	1,2,4-Trimethylbenzene	ND	. 1. 15. 11.1 \$1000.11.1		2.0		1	



Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

11/06/15

SAMPLE RESULTS

Lab ID:

L1528136-01

Client ID:

Sample Location:

RB-9

47 ELM ST., NORTON

Date Collected:

10/30/15 11:00

Date Received:

10/30/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
W12-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	ough Lab					
Ethyl ether	ND		ug/l	2.0		1
Isopropyl Ether	ND		ug/l	2.0		1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0		1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0		1
1,4-Dioxane	ND		ug/l	250		1

Surrogate	% Recovery	Qualifier	Acceptance Qualifier Criteria		
1,2-Dichloroethane-d4	102		70-130		
Toluene-d8	100		70-130		
4-Bromofluorobenzene	108		70-130		
Dibromofluoromethane	107	,	70-130		

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

11/06/15

SAMPLE RESULTS

Lab ID:

L1528136-02

Client ID:

RB-SM-1

Sample Location:

47 ELM ST., NORTON

Matrix:

Water

Analytical Method:

97,8260C

Analytical Date:

11/05/15 15:14

Analyst:

MM

Date Collected:

10/30/15 11:30

Date Received:

10/30/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Volatile Organics - Westborou	gh Lab			3504 VIII. 3505 VIII.	rianiana rianggan	
Methylene chloride	ND		ug/l	2.0		1
1,1-Dichloroethane	ND		ug/l	1.0		1
Chloroform	ND ·		ug/l	1.0	***	1
Carbon tetrachloride	ND		ug/l	1.0		1
1,2-Dichloropropane	ND		ug/l	1.0		1
Dibromochloromethane	ND		ug/l	1.0		1
1,1,2-Trichloroethane	ND		ug/l	1.0		1
Tetrachloroethene	ND	,	ug/l	1.0		1
Chlorobenzene	ND		ug/l	1.0		1
Trichiorofluoromethane	ND		ug/l	2.0		1
1,2-Dichloroethane	ND		ug/l	1.0	profession and the second	1
1,1,1-Trichloroethane	ND		ug/l	1.0		1
Bromodichioromethane	ND		ug/l	1.0		1
trans-1,3-Dichloropropene	ND		ug/l	0.50		1
cis-1,3-Dichloropropene	ND		ug/l	0.50		1
1,3-Dichloropropene, Total	ND		ug/l	0.50	-	1
1,1-Dichloropropene	ND		ug/l	2.0		1
Bromoform	ND		ug/l	2.0		1
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0		1
Benzene	ND		ug/l	0.50		1
Toluene	1.6		ug/l	1.0		1
Ethylbenzene	ND		ug/l	1.0		1
Chloromethane	ND		ug/l	2.0		1
Bromomethane	ND		ug/l	2.0		1
Vinyl chloride	ND		ug/l	1.0		1
Chloroethane	ND		ug/l	2.0		1
1,1-Dichloroethene	ND		ug/l	1.0		1
trans-1,2-Dichloroethene	ND		ug/l	1.0		1
Trichloroethene	ND		ug/l	1.0		1
1,2-Dichlorobenzene	ND		ug/l	1.0		1



Project Name:

REED & BARTON

Project Number: 101726.00

SAMPLE RESULTS

Lab Number: Report Date:

L1528136

11/06/15

Lab ID:

L1528136-02

Client ID:

RB-SM-1

Sample Location:

47 ELM ST., NORTON

Date Collected:

10/30/15 11:30

Date Received: Field Pron

10/30/15 Not Specified

rieid riep:		Not Specified
RL.	MDL	Dilution Factor

sec-Butylbenzene ND ug/l 2.0 1 tert-Butylbenzene ND ug/l 2.0 1 o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1 <th>Parameter</th> <th>Result</th> <th>Qualifier</th> <th>Units</th> <th>RL</th> <th>MDL</th> <th>Dilution Factor</th>	Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4-Dichitorbenzene ND ugri 1,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy (Total) ND ugri 1,0 - 1 Methy (To	MCP Volatile Organics - Westborough Lab						
1,4-Dichitorbenzene ND ugri 1,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy to truly other ND ugri 2,0 - 1 Methy (Total) ND ugri 1,0 - 1 Methy (To	1,3-Dichlorobenzene	ND		ua/l	1.0		1
Methyl tart bulyl either ND		ND			1.0	**	1
phm-Xylateu ND ug/l 2.0 - 1 o-Xylane ND ug/l 1.0 - 1 Xylane (Total) ND ug/l 1.0 - 1 Lac-Lichloroethene ND ug/l 1.0 - 1 1,2-Dichloroethane (total) ND ug/l 2.0 - 1 Dibromomethane ND ug/l 2.0 - 1 Sygene ND ug/l 2.0 - 1 Sygene ND ug/l 2.0 - 1 Dichtoroetfilisoromathane ND ug/l 5.0 - 1 Acetone ND ug/l 5.0 - 1 Cerbon disuritie ND ug/l 5.0 - 1 2-Petraloroe ND ug/l 5.0 - 1 2-Petraloroe ND ug/l 5.0 - 1 2-Petraloroe ND ug/l	Methyl tert butyl ether	ND	•		2.0	**	1
o-Xylone ND ugl 1.0 - 1 Xylone (Total) ND ugl 1.0 - 1 Xylone (Total) ND ugl 1.0 - 1 1.2. Dichloroethane (total) ND ugl 1.0 - 1 Dibromomelhane ND ugl 2.0 - 1 1.2.3-Trichloropopane ND ugl 2.0 - 1 Sylone ND ugl 2.0 - 1 Sylone ND ugl 2.0 - 1 Cathon Idudifide ND ugl 2.0 - 1 Pathanon ND ugl 5.0 - 1 2-Pathanone ND ugl 5.0 - 1 4-Methyl-2-pontanone ND ugl 2.0 - 1 2-Pathanone ND ugl 2.0 - 1 1-Tarbitydrofura ND ugl		ND			2.0		1
Xylane (Total) ND ug/l 1.0 - 1 cis-1,2-Olchloroethene (total) ND ug/l 1.0 - 1 L2-Olchloroethene (total) ND ug/l 1.0 - 1 Dibromomethiane ND ug/l 2.0 - 1 1,2,3-Trichloropropane ND ug/l 2.0 - 1 Styrene ND ug/l 2.0 - 1 Carbon disalfide ND ug/l 5.0 - 1 Tabl	o-Xylene	ND			1.0		1
cli-1,2-Dicthorostherie ND ug/l 1,0 - 1 1,2-Dicthorostherie (total) ND ug/l 1,0 - 1 1,2-Dicthorosthane ND ug/l 2,0 - 1 1,2,3-Trichtoropropane ND ug/l 2,0 - 1 Styrene ND ug/l 2,0 - 1 Obithorodifikoromethane ND ug/l 2,0 - 1 Carbon disutifide ND ug/l 2,0 - 1 Carbon disutifide ND ug/l 5,0 - 1 4-Methyl-2-pentamone ND ug/l 5,0 - 1 4-Methyl-2-pentamone ND ug/l 5,0 - 1 Bromochloromethane ND ug/l 2,0 - 1 Bromochloromethane ND ug/l 2,0 - 1 1,2-Dibromophane ND ug/l 2,0 - 1	Xylene (Total)	ND			1.0		1
1.2 Dichriorenthene (total) ND ug/l 2.0 - 1 Dibromenthane ND ug/l 2.0 - 1 1.2,3-Trichioropropane ND ug/l 2.0 - 1 Styrene ND ug/l 2.0 - 1 Dichlorodifiloromethane ND ug/l 2.0 - 1 Acatone ND ug/l 5.0 - 1 Carbon disulfide ND ug/l 5.0 - 1 2-Bularone ND ug/l 5.0 - 1 4-Mellyk-2-pentanore ND ug/l 5.0 - 1 4-Mellyk-2-pentanore ND ug/l 5.0 - 1 4-Mellyk-2-pentanore ND ug/l 2.0 - 1 8-Bromochloromethane ND ug/l 2.0 - 1 1-2-Obchrosopopane ND ug/l 2.0 - 1 1,2-Ob	cis-1,2-Dichloroethene	ND			1.0		1
Dibromomethane ND ug/l 2.0 - 1 1.2,3-Trichloropropane ND ug/l 2.0 - 1 Styrene ND ug/l 2.0 - 1 Orbichlorodifluoromethane ND ug/l 2.0 - 1 Acetone ND ug/l 5.0 - 1 Carbon disutifide ND ug/l 5.0 - 1 2-Butanone ND ug/l 5.0 - 1 4-Methyl-2-parlianone ND ug/l 5.0 - 1 2-Hexanone ND ug/l 2.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 1-terbalydrofuran ND ug/l 2.0 - 1 1-2-Dibromochane ND ug/l 2.0 - 1 1,1,2-Tertachloroethane <td>1,2-Dichloroethene (total)</td> <td>NĐ</td> <td></td> <td></td> <td>1.0</td> <td></td> <td>1</td>	1,2-Dichloroethene (total)	NĐ			1.0		1
Syrere NO ug/l 1.0 - 1 Dichlorodifluoromethane ND ug/l 2.0 - 1 Acetone ND ug/l 5.0 - 1 Carbon disulfde ND ug/l 5.0 - 1 2-Bularone ND ug/l 5.0 - 1 4-Methyl-2-pentanone ND ug/l 5.0 - 1 4-Methyl-2-pentanone ND ug/l 2.0 - 1 2-Hexanone ND ug/l 2.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 1-2-Dibromochane ND ug/l 2.0 - 1 1,2-Dibromochane ND ug/l 2.0 - 1 1,2-Dibromochane ND ug/l 2.0 - 1 1,1-1,2-Tetrachloroghane ND ug/l 2.0 - 1 1-1,1-1,2-Tetrachloroghane </td <td>Dibromomethane</td> <td>ND</td> <td>•</td> <td></td> <td>2.0</td> <td></td> <td>1</td>	Dibromomethane	ND	•		2.0		1
Dichlorodifiloromethane ND ug/l 2.0 - 1 Acetone ND ug/l 5.0 - 1 Carbon disulfide ND ug/l 2.0 - 1 2-Butanone ND ug/l 5.0 - 1 4-Methyl-2-pentanone ND ug/l 5.0 - 1 2-Hoxanone ND ug/l 2.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 Bromochloropropane ND ug/l 2.0 - 1 1,2-Dibromochlane ND ug/l 2.0 - 1 1,2-Dibromochlane ND ug/l 2.0 - 1 1,1,1,2-Terachloroethane ND ug/l 2.0 - 1 Bromobenzene ND ug/l 2.0 - 1 Bromobenzene ND ug/l 2.0 - 1 Bromobenzene	1,2,3-Trichloropropane	ND		ug/l	2.0		1
Dichlorodifiuoromethane ND ug/l 2.0 1 Acatone ND ug/l 5.0 1 Carbon disulfide ND ug/l 5.0 1 2-Butanone ND ug/l 5.0 1 4-Meltryl-2-pentanone ND ug/l 5.0 1 2-Hexanore ND ug/l 5.0 1 Bromochloromethane ND ug/l 2.0 1 Bromochloromethane ND ug/l 2.0 1 2-2-Dichipropopane ND ug/l 2.0 1 1,2-Dibromochlane ND ug/l 2.0 1 1,1,1,2-Terachloroethane ND ug/l 2.0 1 1,1,1,2-Terachloroethane ND ug/l 2.0 1 Bromobenzene ND ug/l 2.0 1 <t< td=""><td>Styrene</td><td>ND</td><td></td><td>ug/l</td><td>1.0</td><td></td><td>1</td></t<>	Styrene	ND		ug/l	1.0		1
Carbon disulfide ND ug/l 2.0 - 1 2-Butanone ND ug/l 5.0 - 1 4-Methyl-2-pentlanone ND ug/l 5.0 - 1 2-Hoxanone ND ug/l 5.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 Tetrahydrofuran ND ug/l 2.0 - 1 1-2-Dibromorpane ND ug/l 2.0 - 1 1,2-Dibromorpane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1,12-Tetrachloroethane ND ug/l 2.0 - 1 Bromoscharene ND ug/l 2.0 - 1 n-Butylbenzene ND ug/l 2.0 - 1 n-Butylbenzene ND ug/l 2.0 - 1 total	Dichlorodifiuoromethane	ND			2.0		1
2-Butanone ND ugfl 5.0 1 4-Methyl-2-pentanone ND ugfl 5.0 1 2-Hexanone ND ugfl 5.0 1 Bromochforomethane ND ugfl 2.0 1 Tetrahydrofuran ND ugfl 2.0 1 1,2-Dibiromochane ND ugfl 2.0 1 1,2-Dibiromochane ND ugfl 2.0 1 1,3-Dichloropropane ND ugfl 2.0 1 1,1,1,2-Tetrachloroethane ND ugfl 2.0 1 Bromobenzene ND ugfl 2.0 1 n-Butybenzene ND ugfl 2.0 1 e-Butybenzene ND ugfl 2.0 1 e-Butybenzene ND ugfl 2.0 1 e-Butybenzene<	Acetone	ND		ug/l	5.0	***	1
4-Methyl-2-pentanone ND ug/l 5.0 - 1 2-Hexanone ND ug/l 5.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 Tetrahydrofuran ND ug/l 2.0 - 1 2,2-Dichloropropane ND ug/l 2.0 - 1 1,2-Dibromoethane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1-1,1-2-Tetrachloroethane ND ug/l 2.0 - 1 1,1-1,1-2-Tetrachloroethane ND ug/l 2.0 - 1 Bromobanzone ND ug/l 2.0 - 1 n-Buylbenzene ND ug/l 2.0 - 1 tetr-Buylbenzene ND ug/l 2.0 - 1 tetr-Buylbenzene ND ug/l 2.0 - 1	Carbon disulfide	ND		ug/l	2.0	₩.	1
2-Hexanone ND ug/l 5.0 - 1 Bromochloromethane ND ug/l 2.0 - 1 Tetrahydrofuran ND ug/l 2.0 - 1 2,2-Dichloropropane ND ug/l 2.0 - 1 1,2-Dichloropropane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1,1,2-Tetrachloroethane ND ug/l 2.0 - 1 1,1,1,2-Tetrachloroethane ND ug/l 2.0 - 1 Bromobenzone ND ug/l 2.0 - 1 n-Bulylbenzone ND ug/l 2.0 - 1 sec-Bulylbenzone ND ug/l 2.0 - 1 et-Bulylbenzone ND ug/l 2.0 - 1 et-Bulylbenzone ND ug/l 2.0 - 1 et-Buly	2-Butanone	ND		ug/i	5.0	·-	1
Bromochloromethane ND ug/l 2.0 - 1 Tetrahydrofuran ND ug/l 2.0 - 1 2,2-Dichloropropane ND ug/l 2.0 - 1 1,2-Dibromoethane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1,1,2-Tetrachloroethane ND ug/l 2.0 - 1 Bromocharzene ND ug/l 2.0 - 1 Bromocharzene ND ug/l 2.0 - 1 n-Butylbenzene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 ech-Butylbenzene ND ug/l 2.0 - 1 ech-Butylbenzene ND ug/l 2.0 - 1 ech-Butylb	4-Methyl-2-pentanone	ND		ug/l	5.0		1
Tetrahydrofuran ND ug/l 2.0 - 1 2,2-Dichloropropane ND ug/l 2.0 - 1 1,2-Dibromoethane ND ug/l 2.0 - 1 1,3-Dichloropropane ND ug/l 2.0 - 1 1,1,1,2-Tetrachloroethane ND ug/l 2.0 - 1 Bromobenzene ND ug/l 2.0 - 1 Bromobenzene ND ug/l 2.0 - 1 n-Butylbenzene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 c-Chlorotoluene ND ug/l 2.0 - 1 tert-Butylbenzene ND ug/l 2.0 - 1 tert-Butylben	2-Hexanone	ND		ug/l	5.0		1
2,2-Dichloropropane ND ug/l 2,0 1 1,2-Dibromoethane ND ug/l 2,0 1 1,3-Dichloropropane ND ug/l 2,0 1 1,1,1,2-Tetrachloroethane ND ug/l 1,0 1 Bromobenzene ND ug/l 2,0 1 Bromobenzene ND ug/l 2,0 1 n-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1	Bromochloromethane	ND		ug/l	2.0		, 1
1,2-Dibromoethane ND ug/l 2,0 - 1 1,3-Dichloropropane ND ug/l 2,0 1 1,1,1,2-Tetrachloroethane ND ug/l 1,0 1 Bromobenzene ND ug/l 2,0 1 Bromobenzene ND ug/l 2,0 1 n-Butylbenzene ND ug/l 2,0 1 sec-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1 c-Chlorotoluene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1 tert-Butylbenzene ND ug/l 2,0 1 te	Tetrahydrofuran	ND		ug/l	2.0		1
1,3-Dichloropropane ND ug/l 2.0 1 1,1,1,2-Tetrachloroethane ND ug/l 1.0 1 Bromobenzene ND ug/l 2.0 1 n-Butylbenzene ND ug/l 2.0 1 see-Butylbenzene ND ug/l 2.0 1 terl-Butylbenzene ND ug/l 2.0 1 cerl-Butylbenzene ND ug/l 2.0 1 1,2-Dibroro-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 2.0 1 lsopropylbenzene ND ug/l 2.0 1	2,2-Dichloropropane	ND		ug/l	2.0		1
1,1,1,2-Tetrachloroethane ND ug/l 1,0 1 Bromobenzene ND ug/l 2,0 1 n-Butylbenzene ND ug/l 2,0 1 sec-Butylbenzene ND ug/l 2,0 1 terl-Butylbenzene ND ug/l 2,0 1 o-Chlorotoluene ND ug/l 2,0 1 p-Chlorotoluene ND ug/l 2,0 1 1,2-Dibromo-3-chloropropane ND ug/l 2,0 1 Hexachlorobutadiene ND ug/l 0,60 1 Isopropyllenzene ND ug/l 2,0 1 Np-isopropyltoluene ND ug/l 2,0 1 Naphthalene ND ug/l 2,0 1 n-Propylbenzene ND ug/l 2,0 1	1,2-Dibromoethane	ND		ug/l	2.0		1
Bromobenzene ND ug/l 2.0 1 n-Butylbenzene ND ug/l 2.0 1 sec-Butylbenzene ND ug/l 2.0 1 tert-Butylbenzene ND ug/l 2.0 1 o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-isopropyltoluene ND ug/l 2.0 1 Naphthaiene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 <t< td=""><td>1,3-Dichloropropane</td><td>ND</td><td></td><td>ug/l</td><td>2.0</td><td></td><td>1</td></t<>	1,3-Dichloropropane	ND		ug/l	2.0		1
n-Butylbenzene ND ug/l 2.0 1 sec-Butylbenzene ND ug/l 2.0 1 tert-Butylbenzene ND ug/l 2.0 1 o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1	1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	L-14	1
sec-Butylbenzene ND ug/l 2.0 1 tert-Butylbenzene ND ug/l 2.0 1 o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1 <td>Bromobenzene</td> <td>ND</td> <td></td> <td>ug/l</td> <td>2.0</td> <td></td> <td>1</td>	Bromobenzene	ND		ug/l	2.0		1
tert-Butylbenzene ND ug/l 2.0 1 o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 2.0 1 Isopropylbenzene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	n-Butylbenzene	ND		ug/l	2.0		1 -
o-Chlorotoluene ND ug/l 2.0 1 p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	sec-Butylbenzene	ND		ug/l	2.0		1
p-Chlorotoluene ND ug/l 2.0 1 1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	tert-Butylbenzene	ND		ug/l	2.0		1
1,2-Dibromo-3-chloropropane ND ug/l 2.0 1 Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	o-Chlorotoluene	ND		ug/l	2.0		1
Hexachlorobutadiene ND ug/l 0.60 1 Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	p-Chlorotoluene	ND		ug/l	2.0		1
Isopropylbenzene ND ug/l 2.0 1 p-Isopropyltoluene ND ug/l 2.0 1 Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	1,2-Dibromo-3-chloropropane	ND		ug/l	2.0		1
p-Isopropyltoluene ND ug/I 2.0 1 Naphthalene ND ug/I 2.0 1 n-Propylbenzene ND ug/I 2.0 1 1,2,3-Trichlorobenzene ND ug/I 2.0 1 1,2,4-Trichlorobenzene ND ug/I 2.0 1 1,3,5-Trimethylbenzene ND ug/I 2.0 1	Hexachlorobutadiene	ND		ug/l	0.60	-	1
Naphthalene ND ug/l 2.0 1 n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	Isopropylbenzene	ND		ug/l	2.0		1
n-Propylbenzene ND ug/l 2.0 1 1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	p-Isopropyltoluene	ND		ug/l	2.0		1
1,2,3-Trichlorobenzene ND ug/l 2.0 1 1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	Naphthaiene	ND		ug/l	2.0		1
1,2,4-Trichlorobenzene ND ug/l 2.0 1 1,3,5-Trimethylbenzene ND ug/l 2.0 1	n-Propylbenzene	ND		ug/i	2.0		1
1,3,5-Trimethylbenzene ND ug/l 2.0 1	1,2,3-Trichlorobenzene	ND		ug/l	2.0		
	1,2,4-Trichlorobenzene	ND		ug/l	2.0	**	1
1,2,4-Trimethylbenzene ND ug/l 2.0 1	1,3,5-Trimethylbenzene	ND		ug/l	2.0		1
	1,2,4-Trimethylbenzene	ND	an amount de late	ug/l	2.0		1



Project Name:

REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

SAMPLE RESULTS

Lab ID:

L1528136-02

Client ID:

RB-SM-1

Sample Location:

47 ELM ST., NORTON

Date Collected:

10/30/15 11:30

Date Received:

10/30/15

Field Prep:

Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
MCP Volatile Organics - Westbord	ough Lab						
Ethyl ether	ND		ug/l	2.0		1	
Isopropyl Ether	ND		ug/l	2.0		1	
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0		1	
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0		1	
1,4-Dioxane	ND		ug/l	250		1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	105		70-130	
Toluene-d8	95		70-130	
4-Bromofluorobenzene	103		70-130	
Dibromofluoromethane	107		70-130	

REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

97,8260C

11/05/15 07:02

Analyst:

ММ

arameter	Result	Qualifier	Units	RL	MDL
CP Volatile Organics - West	borough Lab for	sample(s):	01-02	Batch: WG8	37646-3
Methylene chloride	ND		ug/l	2.0	**
1,1-Dichloroethane	ND		ug/l	1.0	
Chloroform	ND		ug/l	1.0	
Carbon tetrachloride	ND		ug/l	1.0	
1,2-Dichloropropane	ND		ug/l	1.0	
Dibromochloromethane	ND		ug/l	1.0	
1,1,2-Trichloroethane	ND		ug/l	1.0	
Tetrachloroethene	ND		ug/l	1.0	
Chlorobenzene	ND		ug/l	1.0	
Trichlorofluoromethane	ND		ug/l	2.0	
1,2-Dichloroethane	ND	- 1,p., ;	ug/l	1.0	n-
1,1,1-Trichloroethane	ND		ug/l	1.0	
3romodichloromethane	ND		ug/l	1.0	#-
rans-1,3-Dichloropropene	ND		ug/l	0.50	
cis-1,3-Dichloropropene	ND		ug/l	0.50	
i,3-Dichloropropene, Total	ND		ug/l	0.50	· · · · · · · · · · · · · · · · · · ·
1,1-Dichloropropene	ND		ug/l	2.0	- · · · · · · · · · · · · · · · · · · ·
Bromoform	ND		ug/l	2.0	
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	
Benzene	ND		ug/l	0.50	
Toluene	ND		ug/l	1.0	
Ethylbenzene	ND		ug/l	1.0	
Chloromethane	ND		ug/l	2.0	
Bromomethane	ND		ug/l	2.0	
/inyl chloride	ND		ug/l	1.0	-
Chloroethane	ND		ug/i	2.0	
,1-Dichloroethene	ND		ug/l	1.0	
rans-1,2-Dichloroethene	ND		ug/l	1.0	
Trichloroethene	ND		ug/l	1.0	



REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

Method Blank Analysis Batch Quality Control

Analytical Method:

97,8260C

Analytical Date:

11/05/15 07:02

Analyst:

MM

arameter	Result	Qualifier	Units	RL	MDL
CP Volatile Organics - Westl	oorough Lab for	sample(s):	01-02 E	3atch: WG8	37646-3
1,2-Dichlorobenzene	ND		ug/l	1.0	, tree
1,3-Dichlorobenzene	ND		ug/l	1.0	
1,4-Dichlorobenzene	ND	, , ,	ug/l	1.0	
Methyl tert butyl ether	ND		ug/l	2.0	-
p/m-Xylene	ND		ug/l	2.0	
o-Xylene	ND	or Free coliner becomes a construction for decommendation	ug/l	1.0	
Xylene (Total)	ND		ug/l	1.0	
cis-1,2-Dichloroethene	ND		ug/l	1.0	,
1,2-Dichloroethene (total)	ND		ug/l	1.0	
Dibromomethane	ND		ug/l	2.0	
1,2,3-Trichloropropane	ND		ug/l	2.0	
Styrene	ND		ug/l	1.0	
Dichlorodifluoromethane	ND	·-·······························	ug/l	2.0	
Acetone	ND		ug/l	5.0	
Carbon disulfide	ND		ug/l	2.0	
2-Butanone	ND		ug/l	5.0	
4-Methyl-2-pentanone	ND		ug/l	5.0	·
2-Hexanone	ND		ug/l	5.0	
Bromochloromethane	ND		ug/l	2.0	
Tetrahydrofuran	ND	The state of the s	ug/l	2.0	
2,2-Dichloropropane	ND		ug/l	2.0	
1,2-Dibromoethane	ND		ug/l	2.0	
1,3-Dichloropropane	ND		ug/l	2.0	
1,1,1,2-Tetrachloroethane	ND		ug/l	1.0	
Bromobenzene	ND		ug/l	2.0	Ha
n-Butylbenzene	ND		ug/l	2,0	~**
sec-Butylbenzene	ND		ug/l	2.0	
tert-Butylbenzene	ND		ug/l	2.0	Av-14
o-Chlorotoluene	ND		ug/l	2.0	



REED & BARTON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

Method Blank Analysis Batch Quality Control

Analytical Method: Analytical Date:

97,8260C 11/05/15 07:02

Analyst:

MM

arameter	Result	Qualifier	Units	RL	MDL
ICP Volatile Organics - Westb	orough Lab for	sample(s);	01-02 E	Batch: WG8	37646-3
p-Chlorotoluene	ND		ug/l	2.0	
1,2-Dibromo-3-chloropropane	ND		ug/l	2.0	
Hexachlorobutadiene	ND		ug/l	0.60	
Isopropylbenzene	ND		ug/l	2.0	
p-Isopropyltoluene	ND		ug/l	2.0	
Naphthalene	ND		ug/l	2.0	
n-Propylbenzene	ND		ug/l	2.0	***
1,2,3-Trichlorobenzene	ND		ug/l	2.0	
1,2,4-Trichlorobenzene	ND		ug/l	2.0	
1,3,5-Trimethylbenzene	ND		ug/l	2.0	
1,2,4-Trimethylbenzene	ND		ug/l	2.0	
Ethyl ether	ND		ug/l	2.0	
Isopropyl Ether	ND		ug/l	2.0	
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	
1,4-Dioxane	ND		ug/l	250	-
tert-Butyl Alcohol	ND		ug/l	10	

		Acceptance					
Surrogate	%Recovery	Qualifier	Criteria				
1,2-Dichloroethane-d4	99		70-130				
Toluene-d8	104		70-130				
4-Bromofluorobenzene	100		70-130				
Dibromofluoromethane	101		70-130				



Lab Control Sample Analysis Batch Quality Control

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

'arameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
MCP Volatile Organics - Westborou	igh Lab: Associated sample	(s): 01-02 Batch: WG837	646-1 WG837646-2		
Methylene chloride	107	99	70-130	8	20
1,1-Dichloroethane	100	103	70-130	3	20
Chloroform	20102	102	70-130	000000000000000000000000000000000000000	20
Carbon tetrachloride	91 31.005	93	70-130	2	20
1,2-Dichloropropane	102	102	70-130	911	20
Dibromochloromethane	98	97	70-130	4.02	20
1,1,2-Trichloroethane	108	107	70-130	1.60.00	20
Tetrachloroethene	94	94	70-130	15/15/1 9	20
Chlorobenzene	102	116 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70-130	0	20
Trichlorofluoromethane	93	94	70-130		20
1,2-Dichloroethane	102	104	70-130	2	20
1,1,1-Trichloroethane	93	93	70-130	99 45 0 9 9 1	20
Bromodichloromethane	99	198	70-130		20
trans-1,3-Dichloropropene	100	100	70-130	0	20
cis-1,3-Dichloropropene	99	99.	70-130	0	20
1,1-Dichloropropene	93	104104-1114-11-19-19-11-11-11-11-11-11-11-11-11-11-	70-130		20
Bromoform	######################################	97	70-130	14	20
1,1,2,2-Tetrachloroethane	110	5 110 S	70-130	0.1.44	20
Benzene	100	99	70-130		20
Toluene	100	99°	70-130		20
Ethylbenzene	101	11 1 1 1 99	70-130	2	20



Lab Control Sample Analysis Batch Quality Control

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
MCP Volatile Organics - Westborough I	ab Associated sample	s(s): 01-02	Batch: WG8376	346-1 W	G837646-2			
Chloromethane	99		99		70-130	0	20	
Bromomethane	57	Q	63	Q	70-130	10	20	
Vinyl chloride	95		.96		70-130	1	20	
Chloroethane			109		70-130	5715 F 3	20	
1,1-Dichloroethene	97		96		70-130		20	
trans-1,2-Dichloroethene	102		102		70-130	1	20	
Trichloroethene	98		99		70-130		20	
1,2-Dichlorobenzene	. 104		104	•	70-130		20	
1,3-Dichlorobenzene	100	den un tibbo del mande et al. 1 de la companya es antares.	100		70-130	0	20	
1,4-Dichlorobenzene	104		102		70-130	2 2 2 2 2 3 3	20	
Methyl tert butyl ether	103		105		70-130	2	20	
p/m-Xylene	104		100	Account \$15 months or more for \$40.0 \$1 to each	70-130	4 4	20	Section 11 1 1 20 fortune
o-Xylene	104	.,,	104		70-130	11.110	20	
cis-1,2-Dichloroethene	100		to1		70-130		20	
Dibromomethane	110		103	***************************************	70-130		20	attribute of collect short collections
1,2,3-Trichloropropane	104		100		70-130	4	20	
Styrene	108		107		70-130		20	
Dichlorodifluoromethane	81	A TERRETARIA DE LA SERVICIO DE LA CONTRACTORIO DE LA CONTRACTORIO DE LA CONTRACTORIO DE LA CONTRACTORIO DE LA C	81		70-130	0	20	444-1
Acetone	128		130		70-130	2	20	
Carbon disulfide	13 (11) 92		96 B		70-130	4 7	20	
2-Butanone	110		115	at de la banda en	70-130	44	20	

Lab Control Sample Analysis Batch Quality Control

Project Name:

REED & BARTON

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101726.00

Lab Number:

L1528136

Report Date:

arameter	LCS %Recovery Qua	LCSD I %Recovery Q	%Recovery ual Limits	RPD	RPD Qual Limits
ICP Volatile Organics - Westboroug	gh Lab Associated sample(s)	01-02 Batch: WG837646	1 WG837646-2		
4-Methyl-2-pentanone	106	1106	70-130	0	20
2-Hexanone		112	70-130	5月 5 4月紫耀	20
Bromochloromethane	115	114 22 22 14 14 14 14 14 14 14 14 14 14 14 14 14	70-130	1000	20
Tetrahydrofuran		1941 104 m	70-130	6	20
2,2-Dichloropropane	95 277 27	1. FAIR 95	70-130	0	20
1,2-Dibromoethane	(109) - 109) - 109) - 109) - 109) - 109) - 109) - 109) - 109)	108	70-130	1	20
1,3-Dichloropropane	105	104	70-130		20
1,1,1,2-Tetrachloroethane	98.	98	70-130		20
Bromobenzene	100	98	70-130	2 4 2	20
n-Butylbenzene	To Act to mark the property of the second of	2000000101	70-130	2	20
sec-Butylbenzene	#12#12/Arenshir#196	95	70-130		20
tert-Butylbenzene	######################################	610061347 91	70-130	2	20
o-Chiorotoluene	10 10 10 10 10 10 10 10 10 10 10 10 10 1	99	70-130		20
p-Chlorotoluene	12-77 A 12 STIKE TO HIS TO HE	99	70-130	2	20
1,2-Dibromo-3-chloropropane	[21]	102	70-130	17	20
Hexachlorobutadiene	95 23 33 34 35 35 35 35 35 35 35 35 35 35 35 35 35	100	70-130	5	20
Isopropylbenzene	**************************************	195	70-130	1 1	20
p-lsopropyltoluene	1111111195	92	70-130	102 no. 100 100 100 100 100 100 100 100 100 10	20
Naphthalene	223	20 3151 88 151 152 545	70-130		20
n-Propylbenzene		99	70-130	(Administrative design of the control of the contro	20
1,2,3-Trichlorobenzene	98	106	70-130	DESCRIPTION &	20



Lab Control Sample Analysis Batch Quality Control

Project Name:

REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
MCP Volatile Organics - Westborou	igh Lab. Associated sample	e(s): 01-0:	2 Batch: WG837	646-1 W	G837646-2				
1,2,4-Trichlorobenzene	96		96		70-130	0		20	
1,3,5-Trimethylbenzene	95		94		70-130			20	
1,2,4-Trimethylbenzene	97	etariatas acambia e Petro a contra a co	95		70-130	22	d to the state of	20	round and and address of a set of the set of the set
Ethyl ether	3.5. (108.6) (J.)		105		70-130		no 1	20	
Isopropyl Ether	102		102		70-130	0		20	
Ethyl-Tert-Butyl-Ether	97		96		70-130		#1 57	20	
Tertiary-Amyl Methyl Ether	96		96		70-130	0.	1	20	
1,4-Dioxane	112		126	•	70-130	.12	*	20	
tert-Butyl Alcohol	118		136	Q	70-130	14		20	

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	103		98		70-130
4-Bromofluorobenzene	94		97		70-130
Dibromofluoromethane	103		96		70-130



Project Name: REED & BARTON

Project Number: 101726.00

Lab Number: L1528136

Report Date: 11/06/15

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information Custody Seal

Cooler

Α

Absent

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1528136-01A	Vial HCl preserved	Α	N/A	3,1	Υ	Absent	MCP-8260-10(14)
L1528136-01B	Vial HCI preserved	Α	N/A	3.1	Υ	Absent	MCP-8260-10(14)
L1528136-01C	Vial HCl preserved	Α	N/A	3.1	Υ	Absent	MCP-8260-10(14)
L1528136-02A	Vial HCl preserved	Α	N/A	3.1	Y	Absent	MCP-8260-10(14)
L1528136-02B	Vial HCl preserved	Α	N/A	3.1	Y	Absent	MCP-8260-10(14)
L1528136-02C	Vial HCl preserved	Α	N/A	3.1	Υ	Absent	MCP-8260-10(14)

REED & BARTON

ON

Lab Number:

L1528136

Project Number:

101726.00

Report Date:

11/06/15

GLOSSARY

Acronyms

- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes
or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit; This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS

 Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

NP Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

TIC

- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: Data Usability Report



REED & BARTON

Lab Number:

L1528136

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101726.00

Report Date:

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Data Qualifiers

- Co-elution: The target analyte co-clutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument,
- The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the reporting limit (RL) for the sample,

Report Format: Data Usability Report



REED & BARTON

Project Number:

101726.00

Lab Number:

L1528136

Report Date:

11/06/15

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 3

Published Date: 11/4/2015 9:24:32 AM

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 8260C: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; lodomethane (methyl iodide) (soil); Methyl methacrylate (soil);

Azobenzene; Bromobenzene (aqueous).

EPA 8270D: Dimethylnaphthalene.1.4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility

EPA 8270D: Biphenyl. EPA 2540D: TSS

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4.5-Tetramethylbenzene,

Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; EPA 200.7: Ba,Be,Cd,Cr,Cu,Na; EPA 245.1: Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C,

SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B

EPA 332: Perchlorate.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Tl, Zn;

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, Tl, V, Zn;

EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC.

SM426C, SM4500NH3-BH, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, SM4500NO3-F,

EPA 353.2: Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,

SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics.

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,

Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Δ҈гна	CHAIN OF	CUSTODY	PAGE OF	Date Rec'd	in Lab:	0/30/	(5 ALP	HA Job#:	21528	134
Lakeville, Phone: GAK-	19 Tel: 508-822-8300 DEP Verside Drive MA 023-47 044-2786	Project Information Project Name: Reed & Project Location: 47 Given Project #: [01726] Project Manager: Gliott ALPHA Quote #: Turn-Around Time	1St. Norton	Report in	PEM WREQUITEM MA MCP And Matrix Spike GW1 Standa NPDES RGI te /Fed Progra	Pata Deliver AlL ents & P elytical Method Required on the ords (Info Required) eam	ables Billi □ Sar roject Informa ds □ nis SDG? (Required for Metals &	Yes □ No C' ired for MCP I	fo PO#: ements FRCP Analytical Methodorganics)	ds
Email: elliot.	jacobs estate ma us roject Information:	Date Due: 11/3/15		VOC: DESCED DEZA DESCAZ	METALS: DMCP 13 DMCP 14 DRCF EPH: DRenn	VPH: DRanges & Targets D Ranges Only TPH: DO: DPEST TPH: DO: DPEST	want Only Dringerprint		SAMPLE INFO Filtration G Field G Lab to do Preservation G Lab to do	TOTAL # BOTTL
(Lab Use Only)	Sample ID	Date Time	Sample Sampler Matrix Initials	Sivoc.			444	-	Sample Comments	18
2010 01 OL	RB-SM-1	10/30/15 11:00 10/30/15 11:3	o water 885	V						3
Container Type P= Plastic A= Amber glass V= Viat G= Glass B= Bacteria cup C= Cube O= Other	Preservative A= None B= HCI C= HNO ₃ D= H ₂ SO ₄ E= NaOH F= MeOH G= NaHSO ₄	Relinguisped By:	Container Type Preservative Date/Time		Received By:		Date/Time	Allsamol	es subratted are subjec	
E= Encore D= BOD Bottle	G≅ NaHSO₄ H = Na ₂ S ₂ O₃ I≈ Ascorbic Âcid J = NH ₄ CI K≃ Zn Acetate O= Other	.75	10/20/15	16:12 au	lle Me		14/3415 11	Alpha's To See rever	erms and Conditions.	

7A Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1528136

Instrument ID: Jack.i Calibration Date: 05-NOV-2015 Time: 05:25

Compound	RRF	RRF	MIN RRF	%D	MAX %D	
dichlorodifluoromethane	.64845	.5274			20	
-1-3		.9714			20	
vinyl chloride	82783				20	
bromomethane	.32615			-43	20	F
chloroethane	.41172				20	"
trichlorofluoromethane	.9394	.8704			20	
		.31035	.05		20	
ethyl ether 1,1,-dichloroethene	56977	.55427		3	20	
carbon disulfide	1 7088	1.5794		-8	20	
carbon disulfide methylene chloride	59702			. 7	20	
acetone	100			28	20	F
trans-1,2-dichloroethene		.64086		2	20	-
methyl tert butyl ether	1.2511			3	20	
tert butyl alcohol		.03398	.05	18	20	F
_ 7 mail 1		2.7848	.01	2	20	-
1,1-dichloroethane		1.3689		Õ	20	-
Ethyl-Tert-Butyl-Ether	1 9844	1.9290	.05	-3	20	
cis-1,2-dichloroethene	76984	.7723	.1	0	20	
2,2-dichloropropane	96888	.9199		-5	20	
bromochloromethane			.05	15	20	
chloroform	1.1667	1.1896	.2	2	20	1
chloroform carbontetrachloride	.93122	.84949		-9	20	
tetrahydrofuran	.16797	.18517		10	20	1
1,1,1-trichloroethane	1.0560			-7	20	
1,1-dichloropropene	.90464	.84419		-7	20	
2-butanone	19059	.20891		10	20	
henzene	2.7957				20	
Tertiarv-Amvl Methyl Ether	1.4021				20	
1,2-dichloroethane	.80995	.82646		2	20	
trichloroethene	.71123				20	
dibwomomothono	25257			11	20	
1.2-dichloropropane	.73853			2	20	
bromodichloromethane		.78975		-1	20	
1,4-dioxane	.00297			12	20	F
cis-1,3-dichloropropene	.94696			-1	20	
toluene	2.1705				20	
tetrachloroethene	1.0234				20	
4-methyl-2-pentanone	15137			6	20	
	.l <u></u>					

FORM VII MCP-8260-10

7A CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1528136

Instrument ID: Jack.i

Calibration Date: 05-NOV-2015 Time: 05:25

Lab File ID: 1105B02

Init. Calib. Date(s): 12-OCT-2 12-OCT-2

Sample No: 8260 CCAL

Init. Calib. Times : 11:05

14:19

Compound	RRF	RRF	MIN RRF	%D	MAX %D
trans-1,3-dichloropropene	.8899		1	l .	20
1,1,2-trichloroethane	.45228	1			20
chlorodibromomethane	.66722			:	20
1,3-dichloropropane		1.0004			20
1,2-dibromoethane	.51877			9	20
2-hexanone	.32965			11	20
chlorobenzene	2.4227				20
ethyl benzene	4.0737				20
1,1,1,2-tetrachloroethane		.81982			20
o/m vylone		1.7173		4	20
o/m xylene		1.5993		4	20
oromoform		.5365		-16	20
styrene		2.6809			20
i denmentalhen sens				8 4	20
isopropylbenzene		7.8364		_	1 1
oromobenzene		1.8986		-	20
n-propylbenzene	6.1637		1	-2	20
1,1,2,2,-tetrachloroethane	-	1.1396	1	10	20
2-chlorotoluene		6.0523		-2	20
1,2,3-trichloropropane		.93067	.05	4	20
1,3,5-trimethybenzene		6.5382	.05	-5	20
4-chorotoluene		5.5096		1	20
tert-butylbenzene		5.6961	.05	-7	20
1,2,4-trimethylbenzene		6,4980		-3	20
sec-butylbenzene		8.1897	.01	-4	20
o-isopropyltoluene			.05	-5	20
1,3-dichlorobenzene	3.8379		.6	0	20
1,4-dichlorobenzene	3.6705		. 5	4	20
n-butylbenzene		5.6694	.05	3	20
1,2-dichlorobenzene	3.3135		.4	4	20
1,2-dibromo-3-chloropropane		.16593	.05	21	20
1,2,4-trichlorobenzene	100		.2	-5	20
nexachlorobutadiene		.61256	.05	- 5	20
naphthalene	100		.05	-18	20
L,2,3-trichlorobenzene	1.00	97.705	.05	-2	20
		=====		====	====
libromofluoromethane		.25754		3	20
L, 2-dichloroethane-d4	.27078	.26638	.05	-2	20
coluene-d8	1.1679	1.2045	.01	3	20

FORM VII MCP-8260-10

7A CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1528136

Instrument ID: Jack.i

Calibration Date: 05-NOV-2015 Time: 05:25

Lab File ID: 1105B02

Init. Calib. Date(s): 12-OCT-2 12-OCT-2

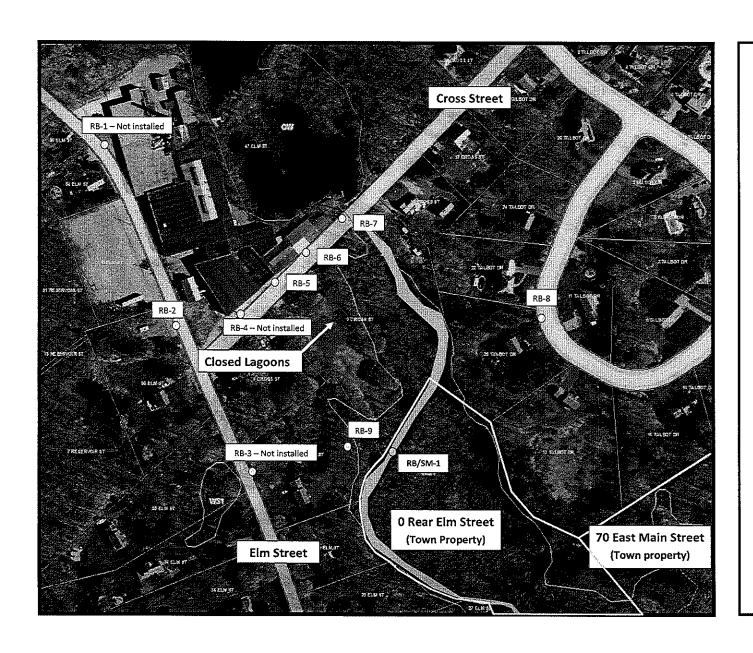
Sample No: 8260 CCAL

Init. Calib. Times : 11:05

14:19

Compound	RRF	RRF	MIN RRF	%D	MAX %D
4-bromofluorobenzene	.86106	.80789	.05	 -6	==== 20
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FORM VII MCP-8260-10



Closed Reed and Barton Facility

Elm Street and Cross Road Norton, MA

- Microwell
- Seepage Meter

0 50 ft
Approx Scale

10/30/15